PB83-120352

Environmental Impact Statement: Henry W. Pirkey Power Plant Unit-I/South Hallsville Surface Lignite Mine Project, Harrison County, Texas

(U.S.) Environmental Protection Agency
Dallas, TX

Sep 82

U.S. Department of Commerce
National Technical Information Service
NTIS

United States
Environmental Protection
Agency

Region 6
1201 Elm Street
Dallas TX 75270

EPA 906/9-82-011
September 1982

Water

EPA

Environmental Impact Statement

Final

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Henry W. Pirkey Power Plant Unit–I / South Hallsville Surface Lignite Mine Project Harrison County, Texas

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✓ Final

Henry W. Pirkey Power Plant Unit–I / South Hallsville Surface Lignite Mine Project Harrison County, Texas

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION VI
1201 ELM STREET
DALLAS, TEXAS 75270

September 10, 1982

TO ALL INTERESTED AGENCIES, PUBLIC GROUPS AND OFFICIALS:

This Final Environmental Impact Statement (EIS) is provided for your review and comment on EPA's New Source National Pollutant Discharge Elimination System (NPDES) permit actions on the H.W. Pirkey Power Plant and South Hallsville Surface Lignite Mine.

Comments on this Final EIS should be sent to Mr. Clinton B. Spotts, Regional EIS Coordinator, EPA, Region 6, 1201 Elm Street, Dallas, Texas 75270. It is requested that comments be submitted within 30 days of the publication of the "Notice of Availability" in the Federal Register.

A Record of Decision, documenting the completion of the environmental review and EPA's decision on the NPDES permits for these two projects, will be sent to agencies and interested parties making substantive comments on the Final EIS and those who request a copy.

Sincerely yours,

Frances E. Phillips
Dick Whittington, P.E.
Regional Administrator

FINAL ENVIRONMENTAL IMPACT STATEMENT

HENRY W. PIRKEY POWER PLANT - UNIT 1/SOUTH HALLSVILLE SURFACE LIGNITE MINE PROJECT HARRISON COUNTY, TEXAS

Responsible Agency:	U.S. Environmental Protection Agency, Region 6
Actions being considered:	Issuance of a new source National Pollutant Discharge Elimination System (NPDES) permit to Southwestern Electric Power Company (SWEPCO) for construction and operation of a lignite-fired power plant in Harrison County, Texas, and issuance of a new source NPDES permit to Sabine Mining Company (SMC) for construction and operation of a surface lignite mine adjacent to the proposed power plant.
Cooperating Agencies:	U.S. Army Corps of Engineers Southwestern Division Fort Worth District U.S. Department of the Interior Office of Surface Mining Bureau of Reclamation Fish and Wildlife Service (Albuquerque, NM and Ft. Worth, TX) National Park Service U.S. Department of Agriculture Soil Conservation Service Federal Emergency Management Agency State of Texas General Government Section, Budget and Planning Office Texas Department of Health Texas Air Control Board Texas Department of Agriculture Texas Department of Water Resources Bureau of Economic Geology State Department of Highways and Public Transportation Railroad Commission of Texas Texas Historical Commission
Contact for further information:	Clinton B. Spotts, Regional EIS Coordinator U.S. Environmental Protection Agency, Region 6 1201 Elm Street Dallas, Texas 75270 Phone: Commercial (214) 767-2716 FTS 729-2716

Abstract:

No action was evaluated as well as numerous power plant and transportive systems design and siting options, alternative energy sources, and alternatives not requiring the creation of new generating capacity in order to meet future electric generation needs. SWEPCO proposes to construct and operate a 720 MW (gross)/640 MW (net) power plant. Associated facilities include three 138 kV transmission lines, a makeup water pipeline from Big Cypress Bayou and a railroad spur. The foundation area for the main building and wastewater ponds has been built on the 272-acre plant island, and the 1,388 acre cooling reservoir has been partially cleared of vegetation. The 100-acre railroad spur has been constructed, as well as a portion of the 700-acre makeup water pipeline. Construction of the transmission lines has not been initiated. No action was evaluated as well as several mine operation alternatives and several reclamation alternatives. SMC proposes to construct and operate a 2.8 million-ton-per-year surface lignite mine under contract to SWEPCO. The proposed mine will be a single-seam, dragline surface mining operation designed to produce lignite for a period of at least 24 years. Limited construction has begun on the 30 acre dragline erection pad. EPA is considering the issuance or denial of new source NPDES permits for the alternatives considered. This Final Environmental Impact Statement documents coordination activities since the draft statement was issued, includes revisions to the statement in response to comments, and presents EPA's, SWEPCO's and SMC's preferred alternatives.

Date Comments due:

Responsible Official:

Frances E. Phillips

Dick Whittington, P.E.
Regional Administrator

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(Please read Instructions on the reverse before completing)

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16. ABSTRACT

Proposed projects include a 720 MW power plant, three 138 kv transmission lines, make-up water pipeline and railroad spur. The 272 acre plant island and 1,388 acre cooling reservoir have been cleared, the 100 acre railroad spur has been constructed as well as a portion of the 700 acre water pipeline. The lignite mine will cover about 20,771 acres of which about 10,545 acres will be impacted by mining. An average of 2.8 tons/year will be mined for 24 years. The reconstructed soil will consist of 6 inches of topsoil over a mixture of the remaining soil and the near-surface overburden. A minimum of 48 inches of cover will be provided over unoxidized overburden, and revegetation will use approved plant species.

17. KEY WORDS AND DOCUMENT ANALYSIS

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PART I

SUMMARY OF DRAFT AND FINAL ENVIRONMENTAL IMPACT STATEMENTS

PART I SUMMARY OF DRAFT AND FINAL ENVIRONMENTAL IMPACT STATEMENTS

A. BACKGROUND

The National Environmental Policy Act of 1969 (NEPA) requires that all Federal agencies prepare environmental impact statements on major actions significantly affecting the quality of the human environment. Furthermore, Section 511(c)(1) of the Federal Water Pollution Act (FWPCA or P.L. 92-500) as amended by the Clean Water Act of 1977 (P.L. 95-217) mandates that the requirements of NEPA apply to issuing a permit under Section 402 of FWPCA for discharging any pollutant by a "New Source" as defined in Section 306 of FWPCA. The Environmental Protection Agency (EPA) determined that the issuance of New Source NPDES permits to Southwestern Electric Power Company (SWEPCO) for the proposed Henry W. Pirkey Power Plant-Unit 1 and The Sabine Mining Company (SMC) for the South Hallsville Surface Lignite Mine represented major Federal actions significantly affecting the quality of the human environment. Therefore, this environmental impact statement (EIS) is prepared to assess the impacts of these EPA permit actions.

B. ALTERNATIVES

Taking no action was evaluated as well as numerous power plant, mine, and transportive systems design and siting options, and alternatives not requiring the creation of new generating capacity, and alternative energy sources. Energy conservation, purchasing power, reactivating or upgrading older plants and baseload operation of existing peaking facilities were considered and found to be insufficient for future electric resource needs. Energy sources such as geothermal, hydroelectric, solar, wind, coal and petroleum gasification, natural gas, and western coal were evaluated and eliminated as being technologically infeasible at present, not cost-effective, or contrary to present governmental policy. Nuclear power was discarded for several reasons, including dependence on limited sources of fuel, high capital costs, and licensing uncertainties. Alternative design systems for the major components of an electric generating station were also considered including cooling, biological controls, air pollution controls, and waste treatment and wastewater handling. Twelve siting options for the proposed power plant were considered using numerous engineering, economic, and environmental criteria. SWEPCO's preferred alternative is to construct and operate a 720 MW (gross)/640 MW (net) power plant with associated transmission lines, a makeup water pipeline, and a railroad spur.

The proposed South Hallsville Surface Lignite Mine will be operated by SMC. Taking no action as well as lignite extraction alternatives were considered, including underground mining, auger mining, and surface mining. All operating lignite mines in the United States are surface mined, and this method was selected by SMC as the preferred lignite extraction alternative for the proposed mine. Other mine operation alternatives for the major components of a surface mine were considered including overburden removal, lignite-loading, lignite transportation, and reclamation.

Alternatives available to the EPA are to issue or deny the NPDES permits for the projects as proposed or to issue the NPDES permits for the projects with certain conditions to minimize or alleviate adverse impacts. EPA prefers to issue the NPDES permits to SWEPCO and SMC as drafted and included in Appendices A and B, respectively, of this Final EIS. Both of these EPA permits are conditioned to avoid or minimize additional adverse impacts to cultural resources.

C. PROPOSED PROJECTS

The project area, which includes the power plant site and mine site, is located approximately 10 miles southeast of the City of Longview in Harrison County, Texas. The project area contains approximately 24,768 acres. Additionally, power plant transportive systems include a 20-mile makeup water pipeline extending from Big Cypress Bayou to the proposed cooling reservoir, three 138 kV transmission lines totaling 11.7 miles, and a 3.5-mile railroad spur. The pipeline right-of-way (ROW) covers approximately 700 acres; the transmission lines, 86 acres; and the railroad spur, 100 acres. At the mine site, overburden will be removed, and lignite will be extracted and hauled to the plant site. There, the lignite will be crushed and used as boiler fuel for the proposed 720 MW (gross)/640 MW (net) power plant.

1. Power Plant

The plant site comprises 3,111 acres within which 272 acres will be the plant island facilities. The plant site will be located in the northeastern portion of the project area, adjacent to the mine site. The cooling reservoir will preempt 1,388 acres, and 1,451 acres surrounding the plant island and cooling reservoir may be affected by plant activities. The cooling reservoir will be located adjacent to and southeast of the proposed plant.

The proposed power plant will contain a Babcock and Wilcox balanced draft, single-reheat, drum-type boiler and a Westinghouse Electric four-flow, tandem-compound, reheat-type turbine. When operating at a maximum continuous rating, the unit will generate from 707 to 720 MW. Approximately 8 percent of the power will be consumed by various unit auxiliaries, leaving about 640 MW of usable power produced. This power will leave the plant site and connect to existing transmission lines located near the site. The unit will consume approximately 541 tons of lignite per hour. A 60-day supply of fuel will be stored on the plant site.

The heat dissipation system will be composed of Foster Wheeler twin- shelf, single-pressure, two-pass surface condensers. Circulating water for condensing the turbine exhaust steam will be provided by a 1,388-acre cooling reservoir, formed by constructing a dam across Brandy Branch Creek. Makeup water for the cooling reservoir will be pumped about 20 miles from Big Cypress Bayou, approximately 1 mile south of Ferrell's Bridge Dam. The makeup water will be transferred by a proposed 36-inch concrete cylinder pipeline to the cooling reservoir. The diversion rate will be 33.4 cubic feet per second, equivalent to 15,000 gallons per minute, with an annual diversion of 18,000 acre-feet.

Condenser cooling water taken from the cooling reservoir will be supplied to the screen house at the plant island by three vertical wet-pit circulating water pumps. The water will pass through a bar grill and traveling water screens, which consist of a series of overlapping, self-draining screen trays mounted on rotating mechanisms. Water will be removed from the condenser unit into a discharge canal and returned to the northeastern corner of the cooling reservoir at the most extreme point in the water flow circuit from the screen house.

Plant makeup water from the cooling reservoir will be stored in the makeup water pond and supplied to the plant by a makeup pump. Traveling screens will be washed with high-pressure service water. Low-pressure water will be used to cool various unit auxiliaries, as makeup to the bottom ash hopper, and as makeup to the SO_2-removal system. High-pressure service water will be used to seal or lubricate slurry pumps, to flush sump pump discharge lines, to wash the boiler regenerative air heaters, to suppress dust in the lignite-handling system, and for the fire protection system.

The power plant waste scheme will include a drain collector pit, service water returns, storm drains, bottom ash basins, a lignite pile runoff basin, a waste slurry sump, a surge pond, a reclaimed water sump, a filtrate overflow sump, and a wastewater treatment system.

Bottom ash produced by the steam generator will be stored in a lined bottom ash hopper. Bottom ash will be sluiced to either of the two bottom ash basins. The bottom ash will be removed from the plant property and sold. Pyrites rejected by the lignite pulverizer will be stored in the pyrite storage tank. Sintered fly ash from the flue gas stream will be collected in hoppers for removal from the plant. Fly ash collected in the precipitator hoppers will be removed by two dry conveying systems of the positive-pressure type. Fly ash stored in the fly ash silo will be mixed with the dewatered SO_2-removal system sludge and placed in a landfill for disposal. Long-term disposal alternatives are undergoing additional evaluation. Necessary permits for future disposal, if applicable, will be obtained at that time.

The fly ash and scrubber sludge will be mixed at the power plant site. The waste will be disposed of within a tract of land owned by SWEPCO. The proposed waste disposal plan features initial landfill and research into the use of ash wastes as a soil amendment for mine reclamation and/or mine disposal. The type of landfill proposed is valley fill, and the initial site in the vicinity of the power plant has a sufficient capacity for 2 years production of ash sludge wastes.

Lignite to power the steam generator will be delivered to the plant site by bottom dump trucks. Conveyors will transport the lignite to the breaker house, to the transfer house, and then to the transfer tower. From the transfer tower, lignite will be transported to a 15,000-ton-capacity emergency coal pile or to the active reclaim storage building. A rotary plow reclaim tunnel will be used to reclaim lignite from the active reclaim storage building and the lignite will be moved by conveyor to the crusher house. From the crusher house, lignite will go into crusher house surge lines and then fed into granulator crushers and into lignite storage silos.

Flue gas will exit the power plant through a 525-foot chimney. NO_x emissions will be maintained below acceptable limits by burner design, burner arrangement, and furnace designs. Particulate matter will be removed from the flue gas stream by Universal Oil Products' cold-side, twin casing, weighted-wire type electrostatic precipitator. SO_2 will be removed from the flue gas stream by a Universal Oil Products, limestone, double-loop-type scrubbing system consisting of four vertical freestanding absorber modules.

2. Mine

The South Hallsville Surface Lignite Mine will be operated for SWEPCO by SMC. The mine site encompasses approximately 20,771 acres. Of this total area, 10,545 acres will be disturbed by mining, 430 acres will be disturbed by the construction of haul roads, 43 acres will be preempted by mine facilities, and 9,753 acres surrounding the area to be mined may be affected by mining activities during the 24-year life of the mine. Approximately 1,317 acres will be in some state of disturbance each year by mining activities. Of this 1,317 acres, pre-mining clearing operations will commence on approximately 439 acres; 439 acres will be mined; and another 439 acres will be restored to approximate original contours. These areas will be reclaimed to existing or higher land-use productivity generally concurrent with overburden removal. A maximum ungraded area of 741 acres will occur in the year 2008.

The area to be mined was determined from a single-seam deposit containing approximately 72 million recoverable tons of lignite. An average of 2.8 million tons of lignite will be extracted from this deposit each year for 24 years.

The proposed mine will use conventional single-seam area mining procedures with two dragline pits. The draglines will use a conventional dig and sidecast procedure. Timber and brush will be cleared as soon as practicable in advance of mining operations.

Drainage and erosion will be controlled by construction of sedimentation control structures prior to surface disturbance in each area. As mining progresses, a series of ditches and diversion structures will be installed to control surface water runoff. The two types of ditches proposed to be used are interceptor ditches and sediment diversion ditches. Additionally, upstream reservoirs will be constructed to control drainage from undisturbed areas. Temporary stream channel diversions for a portion of Hatley Creek, and several of its unnamed tributaries will be constructed. Permanent diversions may be required to enable mining through or near the existing channels and to prevent flood flows from interfering with mining operations.

Levees will be constructed to prevent flooding caused by backwater from the Sabine River and other streams in the project area. Overland flow will be controlled by overland flow diversion channels and catchment basins to prevent runoff from entering mine pits.

Overburden will be removed using two 70- to 120-yard electric-powered walking draglines in a conventional dig and sidecast procedure. Lignite will be loaded from the two active pits by two 12 to 18 cubic-yard hydraulic backhoes, or comparably sized front-end loaders or shovels.

Road construction in the mine area will consist of building lignite haul roads, access roads, and temporary access roads. When roads are no longer needed, the surface will be regraded and reclaimed to an approved postmining land use compatible with the surrounding area. SWEPCO will construct a road from I-20 south around the mine site and west to FM 968. The road will be built to State FM specifications and turned over to the State after completion.

The proposed surface (soil) reconstruction and revegetation operations involve segregation and redistribution of topsoil and near-surface oxidized overburden for use as postmining soil. The reconstructed soil will consist of 6 inches of soil (topsoil) over a mixture of the remaining soil and the near-surface overburden. The two reconstructed layers will provide a minimum of 48 inches of cover over the unoxidized overburden material. The reconstructed soil will be revegetated with approved plant species that are adapted to the region.

Mine facilities will consist of two separate areas: one for dragline erection and the other for mine personnel, storage, and maintenance facilities. The dragline erection area will be partially reclaimed when dragline erection is complete. The remainder of the site will be used to receive and store materials and equipment shipped by rail over the life of the mine. The mine facilities area will exist for the life of the mine.

D. ENVIRONMENTAL EFFECTS OF NO ACTION ALTERNATIVE AND/OR NO EPA NPDES PERMITS

If the proposed power plant and mine were not constructed, environmental conditions within the project site would remain approximately as they presently exist. However, economic development is presently occurring in the project region and is expected to continue.

Without the projects or EPA's permits, certain environmental impacts would still have taken place since construction of the plant site commenced in the spring of 1979. Construction was begun at SWEPCO's own risk. The plant island (272 acres) has been cleared of vegetation and construction of the power plant has begun. The cooling reservoir site (1,388 acres) has been partially cleared of vegetation and construction of the dam is underway. In addition, the railroad spur (100 acres) has been built, and the makeup water pipeline has been totally cleared and partially constructed, and limited construction has begun on the 30 acre dragline erection pad. There has been a long-term non-irreversible commitment of vegetation/wildlife habitat within the cleared areas. Irreversible and irretrievable commitments include cultural resources and construction materials/cost ($109,255,000 through April 1982) within the construction site boundaries.

E. ENVIRONMENTAL EFFECTS OF PROPOSED PROJECTS AND EPA's NPDES PERMITS

1. Topography

Construction of the plant site facilities has resulted in a long-term adverse impact on topography from leveling of the site (construction of the plant site commenced in the spring of 1979). The foundation area for the main building and wastewater ponds have been built on the 272-acre plant island, and the 1,388 acre cooling reservoir has been partially cleared of vegetation. The 100-acre railroad spur has been constructed, as well as a portion of the 700-acre makeup water pipeline. Construction of the transmission lines has not been initiated. Construction of the transportive systems has conformed to the present land surface, and no adverse impacts have occurred. No adverse impacts to topography will occur as a result of power plant or transportive systems operation.

Short-term adverse impacts to local topography will be experienced during mining of a given area. However, following mining, the mined surface will be shaped to a configuration similar to premining topography. Construction of mine facilities will result in adverse impacts to localized alterations of topographic features for the life of the project.

2. Geological Resources

Construction activities associated with the power plant and transportive systems have resulted in localized long-term displacement of shallow surface sediments, but no detrimental impacts to geologic resources have occurred. A minor adverse impact of the proposed power plant would be the possible preclusion of the use of small amounts of natural resources during the life of the project.

The geologic units of the mine area, which overlie the mineable lignite, will experience unavoidable long-term adverse impacts from mining to the depth of the lignite resource removed.

3. Soils

Soil erosion has been unavoidable during the construction of the power plant and will be unavoidable during construction and operation of the mine. The severity of erosion and related impacts will be lessened by employing erosion control techniques (e.g., seeding/sodding, mulching, etc.) until exposed areas are revegetated. Soil erosion at the mine site will be short-term because the area will be stabilized by reclamation. Approximately 52.6 acres of prime farmland, according to Railroad Commission of Texas (RRC) criteria, will be affected by construction or operation of the proposed power plant and mine. Approximately 30.4 percent (6,551 acres) of the soils in the mine area are designated as prime farmland under U.S. Department of Agriculture-Soil Conservation Service criteria. These soils will be unavoidably adversely impacted by mining and reclamation activities.

4. Water Resources

Some short - and long-term adverse impacts on the project area ground-water system will be the lowering of ground-water levels and removal of ground water in active mining areas. Receiving streams are tributaries of the Sabine River and include Brandy Branch, Hatley, Hardin, Rodgers, Clarks, and Mason creeks. The Sabine River is classified for non-contact recreation, propagation of fish and wildlife, and domestic raw water supply. Adverse impacts resulting from the proposed project will not preclude present water uses. Short-term adverse effects on surface water will occur from increases in sediment yield from construction and mining activities.

Other long-term adverse impacts on the ground-water system will be disruption of stratification in the saturated overburden; probable reduction in horizontal permeability and yield characteristics of overburden aquifer strata; probable increase in porosity and storage characteristics of overburden aquifer strata; and increase in dissolved solids concentrated in shallow ground-water systems. A slight beneficial impact will be the recharge of ground water in the vicinity of the power plant's cooling reservoir.

Long-term adverse surface water hydrologic impacts expected as a result of mining activities are alterations in peak runoff rates and volumes resulting from changes in the site topography, topsoil characteristics, vegetative cover patterns, and land uses. Major streams will be altered due to temporary and permanent rerouting, resulting in straighter stream channels and shorter flow lengths. If hydroelectric generation were developed in the future, the diversion of 18,000 acre-feet of water per year from the Red River Basin would result in the potential adverse impact of losing 3,300 megawatt-hours of generating capacity. Short-term adverse surface water impacts will occur from temporary increases in overland runoff from cleared areas, and increased transport of sediments and turbidity in receiving streams during periods of heavy rainfall and increased streamflow.

5. Air Quality

Short-term, localized, adverse air quality impacts have and will occur during project site preparation activities (e.g., clearing, burning, and construction). These impacts will be minor, with only occasional exceedances of normal background levels being realized. The principal air pollutants to be emitted during power plant operation are sulfur dioxide (SO_2), oxides of nitrogen (NO_x), and particulate matter from the proposed plant's stacks. Carbon monoxide (CO) and hydrocarbons (HC) will also be emitted in very small quantities. BACT will be applied to SO_2, NO_x, and total suspended particulates (TSP). Ground-level SO_2 concentrations resulting from power plant operations are predicted to be below threshold levels which may cause damage to sensitive plant species in the vicinity of the plant site. The lignite in the South Hallsville Project area contains low amounts of radioactive elements. Emissions of these radioactive materials will be reduced by air pollution controls at the power plant. Based on the maximum estimated individual dose commitment of 1.8 millirems per year, the introduction of the proposed lignite power plant will cause only very small, if any, adverse health impacts resulting from the release of uranium and thorium decay series' radionuclides. Sources of fugitive dust emissions from the power plant include lignite and limestone handling, processing, and storage operations. Fugitive emissions will be the only air pollutant that will result from mine construction and operation. All reasonable air pollution control measures will be undertaken to prevent fugitive dust from either the power plant or mine from becoming airborne.

6. Sound Quality

Due to the large distances of noise-sensitive receptors from the proposed project facilities (greater than 2,800 feet) and the attenuation effects of surrounding topography and vegetation, only minor noise impacts will occur. Similarly, increased noise levels associated with normal operation of the proposed projects will not have adverse effects on the surrounding area. Increased noise levels will be localized, of relatively short duration, and attenuated with distance from the source.

7. Ecology

Construction of the plant site and transportive systems has adversely impacted local biological communities by the direct elimination of vegetation/wildlife habitat. About 2,460 acres of vegetation/wildlife habitat were preempted by construction of the proposed power plant, cooling reservoir, pipeline corridor, and railroad spur. These areas consisted primarily of upland forest. Eighty-six acres will be cleared for transmission line ROW's, which will cause short-term adverse impacts. Intermittent and perennial stream habitats and associated aquatic communities in the vicinity of the plant site, cooling reservoir, and transportive system ROW's have been adversely impacted from clearing and construction.

During the life of the mine, approximately 10,545 acres of vegetation/wildlife habitat will be cleared. Mining facilities such as an office, warehouse, erection pads, haul roads, diversion structures, sedimentation ponds, levees, etc., will preempt vegetation/wildlife habitat in the 10,226-acre mine ancillary area. Assuming a worst case situation, all of the ancillary area may be affected. These areas consist primarily of upland forest and pasture. The USCE determined that 3,780 acres of wetlands occur on the project site. The first 5-year mining block does not contain wetlands within the actual area to be mined, but approximately 62 acres of wetlands occur within the ancillary activities area. In furture mining activities, 284 acres occur on mining block 2000-2008 B, 292 acres occur on mining block 1996-2000 B, 181 acres occur on mmining block 2001-2008 A, and 4 acres occur on mining block 2001-2006 C (see Fig. 3-15 on page III-8 of this document). Over the life of the project, primary or direct impacts such as construction of levees, haul roads, etc., and secondary or indirect impacts such as sedimentation, erosion, etc. could affect the remaining 2,957 acres of wetlands. Mitigation measures to be employed by SWEPCO and SMC to minimize adverse impacts on wetlands include, as appropriate, avoidance of wetlands, prevention of sediment loading in wetland areas, non-interruption of normal surface-water flow conditions, and erosion control measures. Additional mitigation measures could be required as a result of the environmental review for USCE Section 404 permit actions in wetland areas. Appendix D contains a preliminary Section 404(b)(1) analysis which will be finalized when the applications for Section 404 permits are submitted to the USCE.

In accordance with Section 7 of the Endangered Species Act, a Biological Assessment of the potential impacts to threatened and endangered species in the first 5-year mining block was prepared. As a result of this assessment, EPA determined there is "no effect" on the Red-cockaded Woodpecker, and a "may effect" situation exists for the American Alligator and Bald Eagle (see letter, p. II-50). This determination was reviewed by the U.S. Fish & Wildlife Service (FWS) in Albuquerque, N.M. The FWS concluded that the proposed project would not affect the Red-cockaded Woodpecker or American Alligator and is not likely to jeopardize the continued existence of the Bald Eagle (see Appendix E). The need for additional biological assessments covering the remaining mining blocks will be determined as future Federal permits are required. If EPA has a permit action, any necessary assessment on remaining mine areas should be completed in a timely manner to allow for informal or formal consultation procedures with the FWS.

In other studies conducted for the rest of the project area, no species or habitat was discovered that might be used by the woodpecker or eagle. Potential but limited alligator habitat was present, but no species were observed. However, it was pointed out in the FWS biological opinion that the Red-cockaded Woodpecker may become an inhabitant in the area in the next 10 to 20 years as the young pine trees mature into possible suitable habitat. Likewise, the Bald Eagle may use the cooling reservoir or other project ponds for feeding habitat. The American Alligator may be adversely affected when future mining occurs closer to the Sabine River floodplain and associated wetland areas.

Construction of the power plant and mine facilities will produce short-term adverse impacts on wildlife through increased noise and human activity. Additionally, clearing during reproductive seasons will disrupt breeding activities of wildlife present in the vicinity of areas being cleared. Stresses on wildlife populations in adjacent areas will occur during the sequential mining program.

Increase in siltation due to construction activities has and will result in temporary decreases in some fish, larval insects, and aquatic clam populations and temporary and localized algal blooms. Some insect larvae (e.g., Trichoptera, some Odonates) and clam species preferring coarse substrates may be adversely affected by increased sedimentation. Fish may avoid areas of high suspended material concentrations. Nutrients associated with increased concentrations of suspended solids, particularly following initial clearing, may encourage algal production. Future mine operations will cause short-term adverse impacts on aquatic biota through increased siltation.

Existing vegetation has been preempted by construction of the power plant, cooling reservoir, and most of the transportive corridors; vegetation will be preempted by construction of the mine facilities such as the office, warehouse, etc. These construction activities represent a total commitment of resources for the life of the project. Long-term adverse impacts will result from the mining of lands presently supporting relatively mature, diverse communities, which will take many years to fully re-establish.

Enlarging of Rogers Lake from 5 acres to the 1,388-acre cooling reservoir will permanently change the character of the existing aquatic ecosystem. The resultant lake will greatly increase the fishery habitat and, with proper management, can support a greater diversity of fish and other aquatic species than previously existed. Since the reservoir bottom has already been cleared, artificial tire reefs for fish cover will be placed in the reservoir to aid the development of a recreational fishery.

8. Cultural Resources (Historic and Prehistoric)

Construction-related activities in the power plant and cooling reservoir area have resulted in a total commitment of the existing cultural resources. Construction of the railroad spur ROW has been completed. Construction-related activities completed along the railroad spur and approximately half of the makeup water pipeline ROW have caused potential adverse impacts on any sites that may have existed. A survey of the incompleted portion of the pipeline was completed on 18-19 February 1982 and no sites were found.

A Memorandum of Agreement (MOA) has been drafted between EPA and the State Historic Preservation Officer (SHPO), and forwarded to the Advisory Council on Historic Preservation in compliance with Section 106 of the National Historic Preservation Act. The purpose of this MOA is to avoid or minimize additional construction-related adverse impacts on cultural resources. The MOA is a condition of the NPDES permit, which requires potential project-related adverse impacts on cultural resources to be coordinated with the SHPO of Texas. Compliance with this MOA will satisfy the requirements of Section 106 and will adequately protect cultural resources. Coordination with EPA and SHPO is documented in Part II of this document. The ratified MOA is included as Appendix C.

9. Socioeconomics

The construction and operation phases of the South Hallsville Mine/Pirkey Power Plant-Unit I will induce both beneficial and adverse effects in the study area. Beneficial effects include the creation of new employment and income in the area, which in turn may induce increased business investment, secondary jobs, and income. In addition, electrical power will be generated through consumption of domestic energy sources. Potential adverse effects associated with the project include a short-term lag period in the flow of community services (e.g., housing, public utilities, and retail services) resulting from the size and transience of project construction employment as compared to the more permanent project operation work force.

Beneficial impacts from construction of the mine/power plant include creating an estimated 825 primary jobs and 842 secondary jobs during the peak employment period in 1984. Total local annual income generated by primary employment is estimated to peak in excess of $20 million (1980 dollars). Over the 7-year construction phase, nearly $109 million in construction expenditures is expected to be spent locally, generating about $103 million in additional secondary income.

During peak construction, the population influx associated with worker and family in-migration to the two-county project area is expected to total 2,155 new residents. By 1985, the in-migrant population is anticipated to decrease by approximately 62 percent to 818 persons. This potential adverse impact to local communities could be reduced if construction workers already in the area are hired for the proposed project.

The benefits of project operation will accrue in the study area for a period of 30 years. In addition to construction employment opportunities, it is estimated that the project will provide 271 primary jobs and 273 secondary service jobs during full operation in 1986. Total annual operations expenditures for the power plant and mine are estimated at $78 million (1980 dollars), with a projected $122 million in local secondary income. The new population is expected to peak at 276 persons in 1986. However, the movement of construction workers into operation jobs as well as the release of workers from other area projects can potentially decrease additional operation period in-migration.

During both construction and operation of the combined project, the local housing sector will need to expand to meet in-migration needs. While the construction work force is more likely to use temporary housing (i.e., apartments and mobile homes), the operation work force will require more permanent single family housing.

Approximately 15 occupied dwellings are in the first 5-year permit area and approximately 60 other dwellings occur in the remainder of the area to be impacted by mining or ancillary activities. RRC regulations require that no mining shall occur within 300 feet of an occupied dwelling. Avoiding structures or relocation of families will be a contractural agreement between the homeowner and the applicant on a case-by-case basis.

10. Land Use

A total of 13,091 acres of land and associated land use will be adversely affected by the proposed project (mine, power plant, cooling reservoir, and transportive systems). Additionally, 11,677 acres of ancillary activities area may be potentially adversely affected. The predominant land use of the proposed plant site and mine site is undeveloped forestry (2,068 acres and 4,983 acres, respectively). Operational project impacts focus upon the conversion of existing agricultural land to industrial use during the mining period. Approximately 10,205 acres of agricultural land (pasture and cropland) and 12,594 acres of forested land (undeveloped forest and forestry) would potentially be affected by the proposed project (mine, power plant, cooling reservoir, transportive systems, and ancillary activities areas).

Changes in land use caused by the proposed project will result in the primary adverse impact of short- and long-term removal of existing land uses on the mine and power plant sites. Although RRC regulations require that the permit area be restored to conditions capable of supporting premining land uses, alternative land uses may be approved through consultation with the RRC and landowner. Additional long-term secondary adverse impacts in land use resulting from the proposed project would be increased urbanization, regionally, due to project-related in-migration and potential modifications of wildlife habitat and aesthetic qualities of the land.

PART II

CONSULTATION AND COORDINATION

PART II CONSULTATION AND COORDINATION

On 26 March 1982, the availability of the Draft EIS for the proposed Henry W. Pirkey Power Plant Unit-1/South Hallsville Surface Lignite Mine Project in eastern Texas was published in the Federal Register (47 FR 13033). Approximately 200 copies of the Draft EIS were distributed to Federal and State agencies and to other interested organizations and individuals.

Comments received during the public review period are presented in Part II, A. Letters, notices, and other coordination documentation are presented in chronological order at the end of each subsection of Part II, B below, which supplements Sec. 5.0, Coordination, of the Draft EIS.

A. COMMENTS AND RESPONSES TO THE DRAFT EIS

The following letters were received on the Draft EIS. EPA's responses to numbered comments immediately follow each letter.

TEXAS AIR CONTROL BOARD

6330 HWY. 290 EAST
AUSTIN, TEXAS 78723
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April 2, 1982

RECEIVED
[illegible]

Mr. Paul T. Wrotenbery, Director
Governor's Budget and Planning
Office
Attn: General Government Section
P. O. Box 12428
Austin, Texas 78711

Subject: Draft Environmental Impact Statement of the Pirkey Power Plant and South Hallsville Surface Lignite Mine, Harrison County, Texas
EIS Number 2-03-50-022

Dear Mr. Wrotenbery:

It is the policy of the Texas Air Control Board (TACB) not to require permits for surface mining. However, associated stationary sources of air contaminant emissions such as crushers, classifiers, material handling facilities, and power plants do require TACB permits.

Our records indicate that the following TACB permits have been applied for and have been issued for the above cited facilities: (1) Number 6269--indoor turbine generator, and (2) Number 6270--a lignite handling facility. If additional facilities become necessary, this agency should be contacted regarding permit requirements. You may contact Mr. James Caraway of the Permits Division at extension 226.

Harrison County meets the national primary and secondary air quality standards for carbon monoxide, nitrogen dioxide, sulfur dioxide and particulates (TSP) and is, therefore, in a designated "attainment area" for these criteria pollutants. The county is designated "unclassifiable" for ozone. There has been no designation established for lead.

Thank you for the opportunity to provide assistance. If additional information is needed, please contact me.

Sincerely,

Roger RWallis

Roger R. Wallis, Deputy Director
Standards and Regulations Program

cc: Mr. Richard Leard, P.E., Regional Supervisor, Tyler

RESPONSE TO COMMENTS

FROM:

Texas Air Control Board
6330 Hwy 290 East
Austin, Texas 78723

2 April 1982

Comment	Response
General	No reponse necessary.

United States
Department of
Agriculture

Soil
Conservation
Service

P. O. Box 648
Temple, TX
76503

April 5, 1982

RECEIVED
APR 6 1982
6 ES

Mr. Dick Whittington
Regional Administrator
U.S. Environmental Protection Agency
1201 Elm Street
Dallas, TX 75270

Dear Mr. Whittington:

We have reviewed the draft environmental impact statement for the proposed Henry W. Pirkey Power Plant Unit-1/South Hallsville Surface Lignite Mine Project, Harrison County, Texas and feel that the statement adequately reflects the impacts this project will have on prime farmland and the soil, water, and plant resources.

The planned reconstruction of the overburden material in conjunction with the vegetative reclamation plan should result in controlling erosion and sediment; and, at the same time, maintain the productivity of the soil.

Sincerely,

For GEORGE C. MARKS
State Conservationist

cc: Blake E. Lovelace, AC, SCS, Mt. Pleasant
Paul Leggett, DC, SCS, Marshall

RESPONSE TO COMMENTS

FROM: Soil Conservation Service
U.S. Department of Agriculture
P.O. Box 648
Temple, Texas 76503

5 April 1982

Comment	Response
General	No reponse necessary.

TEXAS DEPARTMENT OF WATER RESOURCES
[illegible]
[illegible]

APR 8 1982

Budget/Planning

TEXAS WATER DEVELOPMENT BOARD
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Louie Welch

Harvey Davis
Executive Director

TEXAS WATER COMMISSION
Lee B. M. Biggart, Chairman
Felix McDonald
John D. Stover

April 5, 1982

Mr. Paul T. Wrotenbery, Director
Governor's Budget & Planning Office
Sam Houston Bldg., 7th Floor
Austin, Texas 78711

Dear Mr. Wrotenbery:

Subject: U. S. Environmental Protection Agency (EPA)—Draft Environmental Impact Statement (DEIS) Relative to the Proposed Henry W. Pirkey Power Plant (Unit 1) and South Hallsville No. 1 Surface Lignite Mine Project, Harrison County, Texas (EPA906/9-82-004, March 1982). State File Reference: EIS No. 2-03-50-022.

In response to your March 26 memorandum, the Texas Department of Water Resources (TDWR) has reviewed the subject report. We offer the following comments from the standpoint of our statutory statewide responsibilities relative to water resources planning, development, and management under the Texas Water Code and the Texas Administrative Code:

1. Based on our evaluation of the findings in the subject DEIS relative to the potential project impacts on surface and ground water sources, as presented in Chapter 4 (particularly section 4.2.2.5, pages 4-55 4-57, and section 4.9, pages 4-214 and 4-215), we concur in principle with EPA's proposed issuance of new source National Pollutant Discharge Elimination System (NPDES) permits pursuant to sections 306 and 402 of P.L. 92-500, to: (a) the Southwest Electric Power Company (SWEPCO) for the construction and operation of the proposed Henry W. Pirkey 720MW/640MW lignite-fired electric generating power plant in Harrison County, Texas, and (b) Sabine Mining Company (SWC) for the construction and operation of the proposed South Hallsville No. 1 (2.8-million-ton/year, 24-year) surface lignite mine, adjacent to the proposed SWEPCO power plant.

2. TDWR's concurrence in principle, is based on the following considerations: (a) the scope of coverage of the DEIS reflects that EPA has given adequate consideration to TDWR's suggestions presented in a letter dated August 25, 1981. (See page 5-33 of the subject DEIS); (b) we assume that the provisions and special conditions to be stipulated in the NPDES permit to be granted by EPA to SWEPCO will be consistent with the provisions and conditions to be included in SWEPCO's State of Texas Waste Discharge permit application now being processed by TDWR; and (c) we assume, also, that the provisions and special conditions to be

stipulated in the NPDES permit to be granted by EPA to SMC will be consistent with the provisions and conditions which will be stipulated in the mining permit being considered by the Texas Railroad Commission (TRC) to SMC (see pages 5-10 and 5-11 of the subject DEIS), and also the provisions and conditions contained in Water Quality and Waste Discharge Permit No. 02538 (NPDES Permit No. TX 0088935) granted to SMC by TDWR and EPA on March 22, 1982.

3. The subject DEIS affords adequate assurances that the applicants will be expected to adopt all reasonable, cost-effective preventive and mitigative measures in the design, construction, operation, and maintenance of the proposed combined mine-mouth power project in order to reduce adverse impacts of the waste effluents on the local and regional environment to insignificant or acceptable levels. Under these conditions, it is expected that residual adverse impacts will be adequately offset by the substantial benefits resulting from improved local employment, industrial growth, and availability of more energy at lowered costs.

TDWR appreciated the opportunity to review the subject report. Please advise if we can be of further assistance.

Sincerely yours,

Seth C. Burnett

Harvey Davis
Executive Director for

RESPONSE TO COMMENTS

FROM:
Texas Department of Water Resources
P.O. Box 13087
Capitol Station
Austin, Texas 78711

5 April 1982

Comment	Response
1.	No response necessary.
2.	No response necessary.
3.	No response necessary.

Federal Emergency Management Agency
Region VI Federal Center Denton, Texas 76201

April 19, 1982

RECEIVED
APR 22 1982
6 ES

Mr. Clinton B. Spotts
Regional EIS Coordinator
U. S. Environmental Protection Agency
1201 Elm Street
Dallas, Texas 75270

Dear Mr. Spotts:

This letter is in reply to the Draft Environmental Impact Statement (DEIS) for the proposed Henry W. Pirkey Power Plant and South Hallsville Surface Lignite Mine Project in Harrison County, Texas. The DEIS proposes flood plain mitigation measures such as drainage ditches, catchment basins, diversion channels, levees, and bridges, which are designed to pass the 100-year flood. It states that temporary stream channel diversion for Hatley Creek will be designed to carry the 10-year, 24-hour flood, and that permanent stream diversions will carry the 100-year flood, and that levees south of and within the project area will contain the 100-year flood and be designed with emergency spillways. If these protective measures are carried out, it appears that the effects of flood plain development will be minimized.

Thank you for the opportunity to comment on the DEIS. If we may be of further assistance, please let us know by writing this office or calling (817)387-5811, Extension 231.

Sincerely,

Cheryl A. Hoke

Cheryl A. Hoke
Emergency Management Specialist
Natural and Technological
Hazards Division

RESPONSE TO COMMENTS

FROM: Federal Emergency Management Agency
Federal Center
Denton, Texas 76201

19 April 1982

Comment	Response
General	No response necessary.

DEPARTMENT OF DEFENSE UNITED STATES OF AMERICA

DEPARTMENT OF THE ARMY
FORT WORTH DISTRICT. CORPS OF ENGINEERS
P. O. BOX 17300
FORT WORTH. TEXAS 76102

REPLY TO
ATTENTION OF:

SWFOD-O

20 April 1982

R D
APR 21 1982
6 ES

Mr. Clinton B. Spotts
Regional EIS Coordinator
US Environmental Protection Agency
Region VI
1201 Elm Street
Dallas, TX 75270

Dear Mr. Spotts:

This is in regard to the Draft Environmental Impact Statement (DEIS) for the Henry W. Pirkey Power Plant Unit-1/South Hallsville Surface Lignite Mine Project, Harrison County, Texas.

1. Reference Section 4.5.1, page 4-97, paragraph two of the DEIS. As stated, our wetland determination delineates approximately 3,780 acres of wetlands within the project area. However, it is also stated in our determination (Appendix C, page two, paragraph four) that this acreage is a perimeter figure and that upland areas exist within this boundary. The topography of a large portion of the site is characterized by a series of broad sloughs and narrow ridges. The photographic scale available to us prohibited an accurate calculation of the acreage of the small upland areas. The referenced statement in the DEIS did not clearly present this fact.

2. We would, therefore, appreciate clarification of this in the Final Environmental Impact Statement (FEIS). The FEIS should reflect that the responsibility to estimate wetland acreages at the South Hallsville site has been delegated to the Corps of Engineers (COE), and therefore, the determination submitted by the COE, and not Espey, Huston, and Associates, will be used in the Section 404 (b)(1) evaluation of the proposed work in the FEIS as well as any future Section 404 permit actions.

If you have any questions or require further assistance, please contact Marje Schlangenstein at 817-334-2681.

Sincerely,

Allie J Majors

ALLIE J. MAJORS
Chief, Operations Division

RESPONSE TO COMMENTS

FROM: U.S. Army Corps of Engineers
Fort Worth District
P.O. Box 17300
Fort Worth, Texas 76102

20 April 1982

Comment	Response
1.	Section 4.5.1.1 (page 4-97) of the Draft EIS was revised to reflect the comment. See page III-18 of this document. A photograph showing the USCE's wetlands determination is included on page III-17 of this document.
2.	Concur. The USCE's wetland determination acreage is used in evaluations of wetlands in EIS's and Section 404 permit actions. To eliminate a misunderstanding, other wetland figures have been omitted. Pages III-16, III-18, III-21, and III-22 of the Final EIS have been revised to reflect this change.

DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
FORT WORTH REGIONAL OFFICE
221 WEST LANCASTER AVENUE
P.O. BOX 2905
FORT WORTH, TEXAS 76113

REGION VI

April 22, 1982

IN REPLY REFER TO:

RECEIVED
APR 23 1982
6 ES

Mr. Clinton B. Spotts
Regional EIS Coordinator
Environmental Protection Agency
Region 6
1201 Elm Street
Dallas, TX 75270

Dear Mr. Spotts:

The Draft Environmental Impact Statement for the Henry W. Pirkey Power Plant - Unit-1/South Hallsville and Surface Lignite Mine Project in Harrison County, Texas, has been reviewed in the Department of Housing and Urban Development's Dallas Area Office and Fort Worth Regional Office. The Department's review comments follow:

1. Cross-reference to incoming inquiry.

   The proposed action is the issuance of new source National Pollutant Discharge Elimination System (NPDES) permits to Southwestern Electric Power Company for construction and operation of a lignite-fired power plant in Harrison County, Texas, and to Sabine Mining Company for construction and operation of a surface lignite mine adjacent to the proposed power plant.

2. HUD comments on the Statement.

   a. Although Appendix A makes mention of the Floodplain Management Executive Order (E.O. 11988), we failed to find anything in the body of the Statement that indicated that the requirements of the E.O. had been or would be complied with. Section 2(c) of the E.O. appears to make such compliance mandatory in this situation.

   b. Although this proposed undertaking is exempted from compliance with the requirements of the Protection of Wetlands Executive Order (E.O. 11990) by Section 1(b) of the E.O., we think the Statement should indicate measures that will be taken to protect and preserve and/or to mitigate unavoidable adverse impacts on wetlands.

AREA OFFICES
DALLAS, TEXAS · LITTLE ROCK, ARKANSAS · NEW ORLEANS, LOUISIANA · OKLAHOMA CITY, OKLAHOMA · SAN ANTONIO, TEXAS

3. HUD comment on the Proposal.

While HUD regrets the adverse impacts on the natural environment associated with this proposed undertaking, because of the need for moderating rapidly increasing energy costs and for reducing dependence on foreign energy sources (with its national security and balance-of-payments implications), HUD does not oppose this proposal.

Sincerely,

fr. Victor J. Hancock
Environmental Clearance Officer

RESPONSE TO COMMENTS

FROM:
U.S. Department of Housing and Urban Development
Fort Worth Regional Office
P.O. Box 2905
Fort Worth, Texas 76113

22 April 1982

Comment	Response
1.	No response necessary.
2a.	The proposed project will comply with Executive Order 11988. Flood protection levees will be constructed near the Sabine River floodplain boundary and along floodplain boundaries of major streams within the mined area (see Draft EIS, Sec. 4.2.2.1, pages 4-30 and 4-32). A description of flood levees is presented in Sec. 3.5.2.3 page 3-101, of the Draft EIS and the effects to the Sabine River floodplain are described in Sec. 4.2.2.4, pages 4-55 and 4-56. In addition, please refer to page III-13 of this Final EIS.
2b.	Mitigation measures to be employed by SWEPCO and SMC to minimize adverse impacts on wetlands include, as appropriate, avoidance of wetlands, prevention of sediment loading in wetland areas, non-interruption of normal surface-water flow conditions, and erosion control measures. Additional mitigation measures could be required as a result of the environmental review for USCE Section 404 permit actions in wetland areas. Appendix D contains a preliminary Section 404(b)(1) analysis which will be finalized when the applications for Section 404 permits are submitted to the USCE.
3.	No response necessary.

PARKS AND WILDLIFE DEPARTMENT

COMMISSIONERS:

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Chairman, Fort Worth

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EDWIN L. COX, JR.
Athens

CHARLES D. TRAVIS
EXECUTIVE DIRECTOR

4200 Smith School Road
Austin, Texas 78744

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Santa Elena

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Dallas

WM. M. WHELESS, III
Houston

April 22, 1982

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APR [illegible] 1982
Budget/Planning

Mr. Paul T. Wrotenbery, Director
Governor's Budget and Planning Office
Attention: General Government Section
Post Office Box 13561 - Capitol Station
Austin, Texas 78711

Re: Henry W. Pirkey, Power Plant, DEIS

Dear Mr. Wrotenbery:

This agency has reviewed the above-referenced document and offers the following comments.

1. Page 4-97, paragraph two states that there is a significant discrepancy between the number of acres of wetlands identified by the consultant as compared to the number of acres of wetlands recognized by the Corps. While this issue should certainly be resolved before an accurate assessment of the adverse impacts can be determined, it would seem appropriate that since the Corps is delegated the responsibility of regulating the wetlands, their figures should be accepted.

2. A statement on page 4-106, paragraph one states that grasses and legumes were seeded in the right-of-way. Allowing the natural invasion of shrubs and the supplemental planting of shrubs would benefit extant wildlife resources.

3. Concerning the surface mining plan, postponing the mining of bottomland hardwoods and other wetlands until last would be very beneficial to wildlife.

4. This agency is currently working with the applicant to develop a fishery management plan for the cooling pond, but since the majority of the reservoir bottom has already been cleared, available fishery management options are limited.

I appreciate the opportunity to review and comment on this document.

Sincerely,

Charles D. Travis
Executive Director

CDT:RWS:te

cc: Jerry Johnson, FWS, Fort Worth

RESPONSE TO COMMENTS

FROM: Texas Parks and Wildlife Department
4200 Smith School Road
Austin, Texas 78744

22 April 1982

Comment	Response
1.	Concur. Revisions have been made on pages III-16, III-18, III-21, and III-22 of the Final EIS to reflect this comment.
2.	Clearing within the ROW was by shearing in order to keep soil disturbance to a minimum and to promote the regrowth of shoots and root sprouts of woody species (Draft EIS, p. 4-106). Shrubs will be allowed to invade naturally within the ROW, but plans do not include supplemental planting.
3.	Concur. Over the life of the project, varying amounts of wildlife habitat (bottomland hardwoods and wetlands) will be adversely impacted by different mining activities/sequences. See discussion provided on page III-22 of the Final EIS.
4.	Concur. The summary and page III-31 of the Final EIS have been revised to reflect this comment.

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION
826 FEDERAL OFFICE BUILDING
AUSTIN, TEXAS 78701

April 23, 1982

IN REPLY REFER TO
HA-TX

EIS Prepared by Another Agency, Environmental
Protection Agency, Henry W. Pirkey Power Plant,
Surface Lignite Mine Project, Texas

RECEIVED
APR 26 1982
6 ES

Mr. Clinton B. Spotts
U. S. Environmental Protection Agency
Region 6
1201 Elm Street
Dallas, Texas 75270

Dear Mr. Spotts:

We have reviewed the subject document and have no comments to offer. It is our understanding that the State Department of Highways and Public Transportation is reviewing the document and will provide appropriate comments on the impact of the action on the highway environment.

George H Nelson
For: John J. Conrado
Division Administrator

RESPONSE TO COMMENTS

FROM: Federal Highway Administration
826 Federal Office Building
Austin, Texas 78701

23 April 1982

Comment	Response
General	No reponse necessary.

3-

COMMISSION
ROBERT H. DEDMAN, CHAIRMAN
A. SAM WALDROP
JOHN R. BUTLER, JR.

STATE DEPARTMENT OF HIGHWAYS AND PUBLIC TRANSPORTATION
DEWITT C. GREER STATE HIGHWAY BLDG.
AUSTIN, TEXAS 78701

ENGINEER-DIRECTOR
MARK G. GOODE

April 23, 1982

IN REPLY REFER TO
FILE NO.
D8-E 854

Draft Environmental Statement
Pirkey Power Plant/South Hallsville Mine
Harrison County

RECEIVED
APR 28 1982
CES

Mr. Paul T. Wrotenbery, Director
Governor's Budget and Planning Office
Sam Houston Building, 7th Floor
Austin, Texas

Dear Mr. Wrotenbery:

Thank you for the opportunity to review the draft environmental statement covering the Henry W. Pirkey Power Plant Unit 1/South Hallsville Surface Lignite Mine Project in Harrison County.

1. Several of the maps in the draft statement do not show correct highway numbers. Our District Office at FM 249 and Park Street in Atlanta will be happy to note the correct highway numbers.

2. The draft statement discusses the construction of a 36-inch water line from Big Cypress Bayou near Ferrell's Dam to the plant site. The pipeline will cross several highways on the State highway system but no mention is made of the necessary permits. It will be necessary to secure permits for all pipelines crossing or located within State highway right of way. Our District Office in Atlanta should be contacted for further information.

3. The Southwestern Electric Power Company (SWEPCO) is constructing a road from IH 20, south and west to FM 968 as shown on the attached map. This new road construction is not shown on the draft statement maps nor discussed in the text. SWEPCO and the Department have agreements whereby the entire cost of the road construction is the responsibility of SWEPCO. The road will be constructed to our Farm to Market standards and after completion will be turned over to the State Department of Highways and Public Transportation.

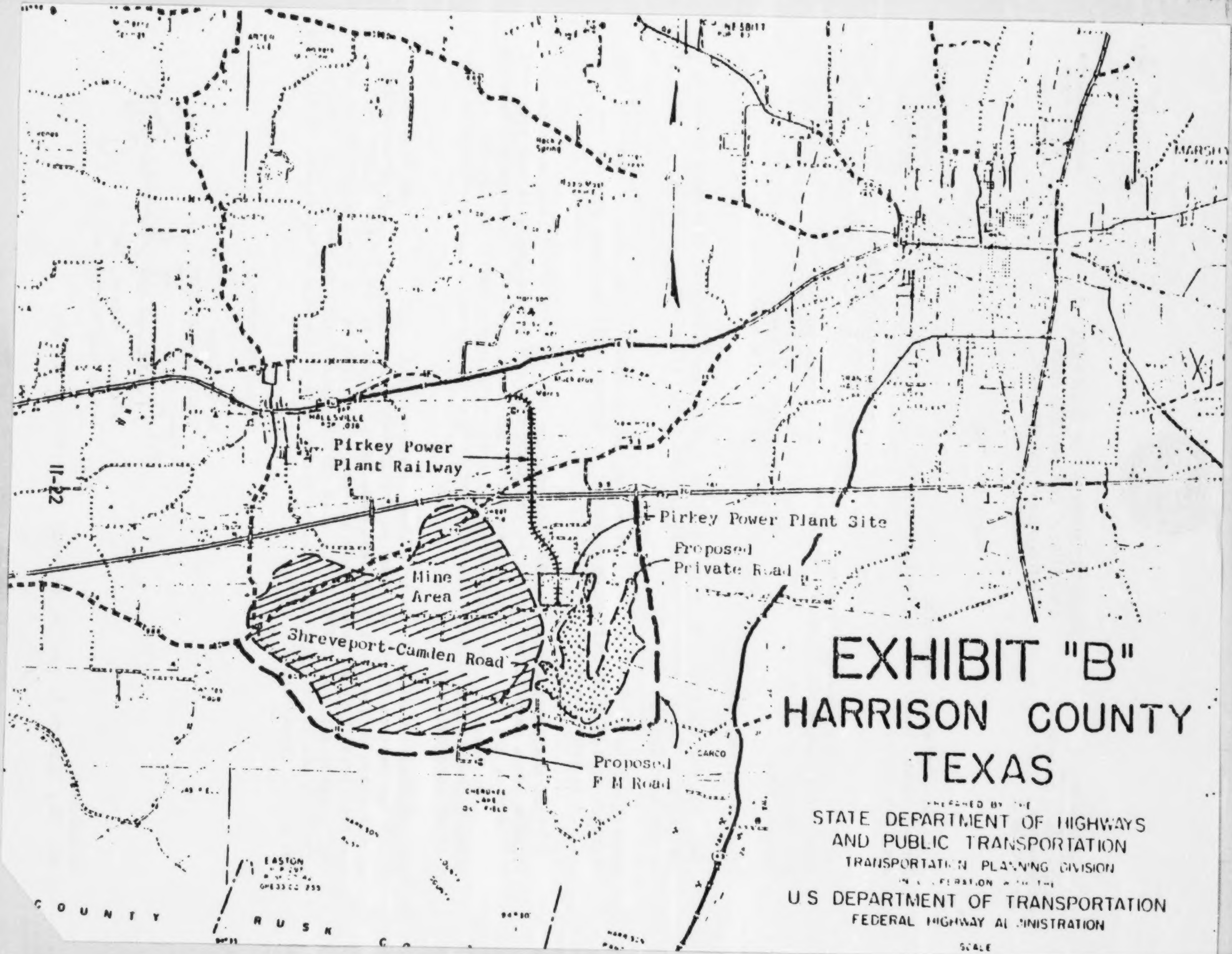
Sincerely yours,

M. G. Goode
Engineer-Director

By: Marcus L. Yancey, Jr.
Marcus L. Yancey, Jr.
Deputy Engineer-Director

Attachment

cc: Mr. Clinton B. Spotts, Regional EIS Coordinator, EPA
jc



Pirkey Power Plant Railway
Pirkey Power Plant Site
Proposed Private Road
Mine Area
Shreveport-Camden Road
Proposed F M Road
HALLSVILLE
NESBITT
MARSHALL
CANCO
EASTON
RUSK COUNTY
SCALE

EXHIBIT "B"
HARRISON COUNTY
TEXAS

PREPARED BY THE
STATE DEPARTMENT OF HIGHWAYS
AND PUBLIC TRANSPORTATION
TRANSPORTATION PLANNING DIVISION
IN COOPERATION WITH THE
U S DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

RESPONSE TO COMMENTS

FROM:
State Department of Highways and Public Transportation
Dewitt C Greer State Highway Bldg.
Austin, Texas 78701

22 April 1982

Comment	Response
1.	FM 968 was incorrectly labeled State Highway 80 on pages 4-91 and 4-201 of the Draft EIS. U.S. Highway 259 was incorrectly labeled State Highway 26 on pages 3-9, 3-36, 3-41, and 3-78 of the Draft EIS.
2.	Concur. Table 1-1 on page III-6 has been revised in the Final EIS to reflect this comment. Additional discussion is included on pages II-67 and II-68 of this document.
3.	Concur. Page 3-126 of the Draft EIS was revised to reflect the comment. See page III-9 of this document.

FEDERAL ENERGY REGULATORY COMMISSION
WASHINGTON 20426

IN REPLY REFER TO:

OEPR-DHRA
Draft Environmental
Statement
Henry W. Pirkey
Powerplant
Harrison County, Texas

RECEIVED
APR 30 1982
6 ES

APR 26 1982

Mr. Clinton B. Spotts
Regional EIS Coordinator
U. S. Environmental Protection Agency
Region VI
1201 Elm Street
Dallas, Texas 75270

Dear Mr. Spotts:

This is in response to the letter of March 15, 1982, from the Regional Administrator, Region VI, requesting comments on the Draft Environmental Impact Statement (DEIS) for the Henry W. Pirkey Powerplant Unit-1/South Hallsville Surface Lignite Mine Project, Harrison County, Texas.

The proposed project consists of a 720-megawatt steam-electric powerplant, a lignite mine of approximately 20,771 acres, a 20-mile makeup water pipeline to the proposed cooling reservoir, 117 miles of 138 kv transmission lines, and a 3.5-mile railroad spur.

We have reviewed the DEIS to determine the effects of the proposed project on matters relating to the Commission's responsibilities under the Federal Power Act, Natural Gas Act, and other authorities. Such authorities relate to the licensing of non-Federal hydroelectric power projects, participation in the planning of Federal water and power resources projects and the regulation of construction and operation of natural gas pipelines.

1. Our review indicates that the alternative energy sources discussed in section 3.3 on page 3-4 does not include hydroelectric power as an alternative source.

   Makeup water for powerplant cooling purposes would be provided from the conservation storage of the existing Lake O' The Pines Reservoir. Water released from the reservoir into Big Cypress Bayou would be pumped about 20 miles into a cooling reservoir formed by constructing a dam across the Brady Branch Creek. The diversion rate will be 33.4 cubic feet per second with an annual diversion of 18,000 acre-feet.

2. The impacts on potential downstream hydropower plants resulting from the diversion of 18,000 acre-feet per year from the Red River basin into the Sabine River basin were not evaluated in the DEIS. Although there are no existing hydroelectric power projects, potential for hydroelectric power development exists on Big Cypress Bayou downstream of the Lake O' The Pines and Lake Caddo Reservoirs and at Locks and Dams 1 through 6 on Red River. Preliminary permits for studies of non-Federal hydropower installations have been issued by the Commission for

all projects except Caddo Lake and Lock and Dam 6. An application for a preliminary permit is pending for the Caddo Lake Project.

3. Our analysis indicates that the diversion of 18,000 acre-feet of water from the Red River basin would result in a reduction of approximately 3,300 megawatt-hours of hydropower generation per year at the eight potential projects.

4. The DEIS did not discuss the impacts on oil and natural gas pipelines located within the project area. United Gas Pipeline Company (United) was authorized by the Commission in FERC Docket No. CP81-207-000 to relocate approximately 13 miles of natural gas pipeline because of the proposed project. This relocation resulted in the abandonment of gas service to nine customers. Since additional pipelines could require relocation, we suggest that the FEIS include a discussion of any resulting impacts on natural gas transmission companies and their customers.

Sincerely,

Robert E. Cackowski

Robert E. Cackowski, Acting Director
Office of Electric Power Regulation

CHAIRMAN
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[illegible]. TERRAZAS, SAN ANTONIO
DR. DAN A. WILLIS, FORT WORTH

P.O. BOX 12276
AUSTIN, TEXAS 78711

TELEPHONE
(512) 475-3092

April 30, 1982

Mr. Paul T. Wrotenbery, Director
Governor's Budget and Planning Office
Attn: General Government
Sam Houston Bldg., 7th Floor
14th and San Jacinto
Austin, Texas 78711

Re: Pirkey Power Plant & South
Hallsville Lignite Mine - Draft EIS
EIS #2-04-50-014
2-03-50-022

Dear Mr. Wrotenbery:

1. We have received and reviewed the draft EIS referenced above. We not that only portions of the compliance procedures under 36 C.F.R., Part 800 for this undertaking have been completed and that statements are made regarding further compliance actions to be taken by SWEPCO. On page 4-145 it is reported that a 100 per cent survey for archeological properties was accomplished by L. W. LeVardera. Our office does not have a copy of the survey report and we have no knowledge of the author or his professional qualifications. We request a copy of the report and a vita of the archeologist.

2. On page 4-145 it is noted that a potentially significant historic site associated with the Andrew Blair House Site was destroyed within the power plant site. However no trinomial site number or definative information was given. From the description we cannot determine which site has been destroyed, the Blair House or another site nearby.

In order to follow compliance procedures, consultation with the State Historic Preservation Officer is imperative. We look forward to reviewing a draft of the proposal for a Memorandum of Agreement (as mentioned on page 4-146 of the EIS), a copy of the survey report, the vita of the professional, the preliminary case report, and future scopes of work and research proposals in order to bring the project into compliance for all agencies affected. We hope future coordination and review of this undertaking will preclude the irreplaceable loss of cultural properties.

Thank you for the opportunity to participate in the review process.

Sincerely,

LaVerne Herrington

LaVerne Herrington, Ph.D.
Deputy State Historic Preservation Officer

RECEIVED
MAY 3 1982
6 ES

CC: Clinton Spotts, EPA
Jay Pruett, SWEPCO

The State Agency for Historic Preservation

RESPONSE TO COMMENTS

FROM: Texas Historical Commission
P.O. Box 12276
Austin, Texas 78711

30 April 1982

Comment	Response
1.	The 100-percent archaeological survey referenced as being performed by L.W. LeVardera on page 4-145 of the Draft EIS was only for the proposed 30-acre dragline erection site; a description of other investigations is provided in preceding paragraphs (pages 4-143 and 4-144). Since the publication of the Draft EIS, the proposed dragline erection site has been moved to an area that will be directly impacted by mining at a future date. A 100- percent survey of this area has also been performed by L.W. LeVardera. Two historic sites encountered during this survey were not recommended for testing their eligibility for inclusion in the National Register of Historic Places. The vita for L.W. LeVardera was sent to the SHPO on 11 June 1982.
2.	The structure of the Andrew Blair House proper was completely removed by locals in years past and therefore has no trinomial site number. The potentially significant historic site (41HS153) referenced on page 4-145 of the Draft EIS consisted of early 20th century plank and log buildings (i.e., smoke house and miscellaneous structures) and a hand dug well in proximity to the previous location of the Andrew Blair House Site.

DEPARTMENT OF HEALTH & HUMAN SERVICES

Public Health Service

Centers for Disease Control
Atlanta Georgia 30333
(404) 262-6649

May 3, 1982

RECEIVED
MAY 6 1982
6 ES

Mr. Dick Whittington, P.E.
Regional Administrator
U.S. Environmental Protection Agency
Region VI
1201 Elm Street
Dallas, Texas 75270

Dear Mr. Whittington:

We have reviewed the Draft Environmental Impact Statement (EIS) for the Henry W. Pirkey Power Plant, Unit 1, South Hallsville Surface Lignite Mine, Harrison County, Texas. We are responding on behalf of the Public Health Service.

We do not believe that the EIS adequately addresses a number of issues that may impact on health, safety, and well-being of human populations.

1. The Final EIS should state whether or not the onsite landfills have been or will be permitted by the State.
2. An at-grade crossing of Highway 968 is indicated for the rail line. What safety protection measures are being taken at this crossing?
3. No mention is made of the relocation of any families from the land encompassed by this project. If there are any families that will be displaced, the Final EIS should describe the relocation procedures that will be followed.
4. Additionally, vector control measures for either the power plant water storage areas, including the 1,388 acre cooling reservoir, the sedimentation control structures, reservoirs, and other measures for surface water control at the mine are not mentioned. The Final EIS should address the extent of existing or anticipated vector control problems, control measures to be followed, and proposed application rates and methods of application for any insecticides that may be used.

Thank you for the opportunity of reviewing this EIS. We would appreciate receiving a copy of the final document when it becomes available. If you should have any questions about our comments, please contact Mr. Lee Tate of my staff at FTS 236-6649.

Sincerely yours,

Frank S. Lisella

Frank S. Lisella, Ph.D.
Chief, Environmental Affairs Group
Environmental Health Services Division
Center for Environmental Health

RECEIVED
MAY 5 1982
Air & Waste
Management Division

RESPONSE TO COMMENTS

FROM: Department of Health & Human Services
Center for Environmental Health
Atlanta, Georgia 30333

3 May 1982

Comment	Response
1.	SWEPCO will obtain the appropriate solid waste permits for onsite landfills from the TDWR.
2.	Electric cantilevered signals will be the implemented safety measure at at-grade crossings. All measures will meet State Department of Highways and Public Transportation safety requirements.
3.	Approximately 15 occupied dwellings are in the first 5-year permit area and approximately 60 other dwellings occur in the remainder of the area to be impacted by mining or ancillary activities. RRC regulations require that no mining shall occur within 300 feet of an occupied dwelling. Avoiding structures or relocation of families will be a contractural agreement between the homeowner and the applicant on a case-by-case basis.
4.	The cooling reservoir will assume a fish and other aquatic biota population similar to other east Texas reservoirs. Populations of small fish, as well as larger species of fish in their juvenile stages, will serve as effective vector controls. Vector controls for water facilities are not planned at this time but may be implemented if necessary after operations begin. If needed, insecticides would be applied according to label instructions.

COMMENTS

1. We have reviewed the draft EIS for Unit 1/South Hallsville Surface Lignite Mine Project EIS#2-03-50-022. We found the environmental impact statement well prepared with generally good to excellent plans for developing the operation. We recognize the importance of developing and utilizing the energy resource represented by lignite as a result of the rapid depletion of domestic oil and gas resources. The Texas Department of Agriculture has a number of concerns however. In the first instance, the amount of land involved in this and additional projects is very large, i.e., 375,000 acres expected to be impacted by this project alone. In view of the large amount of land involved, the pine-hardwood area will be seriously impacted.

2. If numerous power plants are located in the area as seems likely, the potential for producing acid rain in an area where the soils are largely unbuffered could pose a serious problem impacting the vegetation of the area and the surface water quality. It appeared to us, from our examination of the draft EIS, that insufficient attention was devoted to the potential production of acid rain.

3. Plans are included for reconstruction and revegetation within a relatively short period of time. We urge that an active research program in cooperation with the Texas Agricultural Experiment Station be undertaken and maintained to determine the very best practices for use in reconstruction and revegetation with the hope that the time interval required could be shortened and improved methods of reconstruction and revegetation developed.

Person Conducting Review (Signature) John E. Hutchison

Agency Texas Dept of Agricult. Date 4/1/82

RESPONSE TO COMMENTS

FROM:

Texas Department of Agriculture
P.O. Box 12847
Capitol Station
Austin, Texas 78711

1 April 1982

Comment	Response
1.	Concur. Of the 24,768 acres associated with the mine site, plant site, and transportive systems, 10,545 acres will be disturbed by mining during the 24-year life of the mining operations; approximately 4,000 acres will be impacted by the power plant and transportive systems during construction. The total acreage of upland pine-hardwood forest (including pine plantation) in the total project area that will be pre-empted and, therefore, adversely impacted is 11,557.
2.	The 1982 study on acid deposition in Texas by the Texas Energy & Natural Resources Advisory Council (TENRAC, 1982) concluded that, although monitored data in east Texas records that acid rain has fallen in recent years, there has been no reported damage to vegetation or adverse effects to surface waters. This study evaluated fourteen years of surface water data and concluded that streams in east Texas were not experiencing effects commonly associated with acid precipitation in other areas of the United States. In order to evaluate the potential impact of acid rain that may be created in Texas, a direct cause-and-effect relationship between point source emissions and acid rain must be established. This relationship is not known at this time. Until more is known about the causes of acid precipitation, EPA will continue to research and encourage others to study the problem. The TENRAC study documents that a plan to evaluate acid rain issues in Texas has been formulated, and monitoring of precipitation chemistry in east Texas is currently being conducted. SWEPCO is sponsoring an acid precipitation monitor near Marshall, Texas. Other monitoring of acid rain in east Texas is being done by several governmental agencies and university researchers at Longview, Tyler and Nacogdoches, Texas.
3.	An active research program is ongoing at this time and is being performed by reclamation specialists of SWEPCO/SMC. A District Cooperative Agreement has been executed by SMC and the Harrison County Soil and Water Conservation District. The agreement is presented in Appendix F.

James C. Conner
P. O. Box 313
Marshall, Texas 75670

April 29, 1982

RECEIVED
APR 30 1982
6ES

Clinton B. Spotts
1201 Elm Street
Dallas, Texas 75270

Dear Sir,

With regard to the environmental impact of lignite mining in East Texas and particularly the current Swepco application,there seems to be an area of interest which has not been mentioned in the press reports of the matter. I refer to reforestation of the mined area.

1. It is manifestly wrong to speak of restoration of the topography when the bulk of the lignite mined and removed is not replaced from some outside source. This would be impractical but to speak of restoring the topography to its former state is misleading and should be corrected in the releases.

2. Notwithstanding the impraticality of profile restoration there are ways to improve the restoration aspect and that would be a law requiring the lands be replanted to forests according to the orders of a State authority, possibly the State Forest Service. Of course the best species would be used giving consideration to drainage, land use, soil conditions etc. The surface owner would have the final say as to the replanting proceedure and programs but the public has an interest in seeing that these beautiful forests in East Texas are not left stripped away to leave the land bare and erroded forever where the mining operation has taken place.

3. I would suggest that surface mining permits require agreement on an undertaking by the operator such as above, whether or not the State enacts enabling legislation. The surface owner at the time of restoration should be a party to the matter but in the absence of a statement to the contrary from the owner, the operator should proceed with reforestation as a part of restoration.

Yours very truly,

RESPONSE TO COMMENTS

FROM:
James C. Conner
P.O. Box 313
Marshall, Texas 75670

29 April 1982

Comment	Response
1.	Topography refers to the surface elevation of the land. The mined surface will be returned to its approximate original contour in accordance with RRC surface mining regulations, Part 816.384(b)(1). A 3-12 percent net volume increase will occur after initial swelling and compaction (see Draft EIS, Sec. 4.1.1.4, page 4-4). This will compensate for the volume of lignite removed.
2.	Concur.
3.	Requirements for revegetation (including reforestation) of a mined area are specified by the Coal Mining Regulations of the RRC (Part 816.390-.396). The RRC has been given the authority to administer the state program by the Federal Office of Surface Mining. Part 816.399 requires that all mined land be restored to conditions equal to premining or to higher or better uses. The decision to restore the land to its original condition or to improve it rests with the surface landowner. The surface landowner may also decide the ultimate land use for his reclaimed land. Restoration (or reclamation) plans are reviewed by various Federal and State agencies, including the Texas Parks and Wildlife Department, FWS, and the U.S. Soil Conservation Service, and must be approved by the RRC.

DEPARTMENT OF DEFENSE UNITED STATES OF AMERICA

DEPARTMENT OF THE ARMY
SOUTHWESTERN DIVISION, CORPS OF ENGINEERS
1114 COMMERCE STREET
DALLAS, TEXAS 75242

RECEIVED
MAY 4 1982
6 ES

REPLY TO
ATTENTION OF
SWDPL-R

30 APR '82

Mr. Clinton B. Spotts
Regional EIS Coordinator
US Environmental Protection Agency, Region 6
1201 Elm Street
Dallas, TX 75270

Dear Mr. Spotts:

This is in reference to the Draft EIS for the Henry W. Pirkey Powerplant/South Hallsville Surface Lignite Mine Project, Harrison County, Texas, furnished for review.

Our review resulted in the following comments, which are furnished for your consideration in preparing the final statement.

a. The pipeline crosses Little Cypress Bayou just upstream of the proposed damsite, an element of a plan currently under investigation by the Fort Worth District. Since the studies are in an early stage, the presence of pipeline can be readily accommodated.

b. No other Corps' projects or studies appear to be affected.

c. The Corps of Engineers regulates the discharge of dredged and fill material into the waters of the United States, including adjacent wetlands, under Section 404 of the Clean Water Act. It appears that the proposed project will be located upstream of the headwaters of the affected stream and thus would be authorized by a nationwide permit, provided it causes no adverse effects to the aquatic environment community, as expressed in the Section 404 (b)(1) guidelines and complies with the conditions indicated on the inclosed form.

d. It is noted that the map depicting the Corps of Engineers area of jurisdiction, furnished to you in conjunction with the USCE Wetlands Determination, was omitted. It is important that the map be included in the final EIS.

e. It is also noted that a Section 404(b)(1) Evaluation Report has been omitted. It should be included in the final EIS. We would appreciate the opportunity to review the evaluation prior to publication. This coordination should be made directly with the Fort Worth District Permits Section.

f. Paragraph 3, page 4-32, states that levees will need to be built to protect the minesite. Paragraph 4, page 4-56, states that the levees will cause minor increases in flood elevations. It would be helpful if the increased flood elevations were better quantified and described expected impacts.

We appreciate the opportunity to review the Draft EIS. If you have any questions regarding the comments, please contact Harold Green at 729-2305.

Sincerely,

Barry G. Rought

BARRY G. ROUGHT, P.E.
Chief, Planning Division

1 Incl
As stated

CF:
SWFED-PR
SWFOD-O

NATIONWIDE PERMIT FOR SPECIFIC TYPES OF DISCHARGES

The Corps of Engineers regulates the discharge of dredged or fill material into the waters of the United States under authority of Section 404 of the Clean Water Act (Public Law 95-217, dated 27 December 1977). Such waters of the United States include nontidal rivers, streams, natural lakes, impoundments, and their adjacent wetlands. General permits have been issued on a nationwide basis for discharges into these waters. If your project is to be constructed within the terms of the criteria indicated below it is authorized by nationwide permit and no further administrative action is necessary. If the project does not fit the criteria make application for an individual permit to the District Engineer; ATTN: Chief, Operations Division, SWFOD-O; P.O. Box 17300; Fort Worth, Texas 76102. If you have any further questions, contact the Permits Section at 817-334-2681.

☐ **Utility Line Crossings:** Dredged or fill material used as backfill or bedding for utility line crossings is authorized provided there is no change in the preconstruction bottom contours (excess material must be removed to an upland site).

☐ **Bank Stabilization:** Material discharged for bank stabilization is authorized provided the activity is less than 500 feet in length, is necessary for erosion protection, and discharges average less than one cubic yard per running foot of shoreline. In addition no material may be placed in a wetland or in such a way as to impair the flow of water into or out of such an area.

☐ **Minor Road Crossings:** Material discharged in construction of a minor road crossing is authorized provided that less than 200 cubic yards of material is placed below the ordinary high water mark, that the crossing is bridged, culverted, or designed to prevent the restriction of expected high flows, and that discharges into any wetlands adjacent to the waterbody do not extend more than 100 feet from either side of the ordinary high water mark.

☐ **Maintenance of Existing Facilities:** Material discharged for repair, or replacement of existing facilities is authorized provided the original structure was authorized, fill associated with the original structure is currently serviceable, work does not exceed the original design and specifications, and further that the fill to be maintained has not been put to uses which differ from those of the authorized structure.

☐ The discharge will not be located in the proximity of a public water supply intake.

☐ The discharge will not occur in areas of concentrated shellfish production.

☒ The discharge will not destroy a threatened or endangered species as identified under the Endangered Species Act, or endanger the critical habitat of such species.

☐ The discharge will not disrupt the movement of those species of aquatic life indigenous to the waterbody.

☒ The discharge will consist of suitable material free from toxic pollutants in other than trace quantities.

☒ The fill created by the discharge will be properly maintained to prevent erosion and other nonpoint sources of pollution.

☒ Finally the discharge will not occur in a component of the National Wild and Scenic River System or in a component of a state's wild and scenic river system.

SWF FL 873
19 May 80

Incl 1

RESPONSE TO COMMENTS

FROM:

U.S. Army Corps of Engineers
Southwestern Division
1114 Commerce Street
Dallas, Texas 75242

30 April 1982

Comment	Response
a.	No response necessary.
b.	No response necessary.
c.	No response necessary.
d.	A map showing the USCE Fort Worth District wetlands determination is included in Part III, page III-17 of this document.
e.	A preliminary Section 404(b)(1) analysis is included as Appendix D to this document.
f.	Section 4.2.2.4 (page 4-55) of the Draft EIS has been revised to incorporate the comment. See pages III-13 and III-14 of this document.

OFFICE OF THE GOVERNOR

WILLIAM P. CLEMENTS, JR.
GOVERNOR

May 4, 1982

RECEIVED
MAY 7 1982
6 ES

Mr. Clinton B. Spotts, Regional EIS Coordinator
U.S. Environmental Protection Agency, Region VI
1201 Elm Street
Dallas, Texas 75270

Dear Mr. Spotts:

The Draft Environmental Impact Statement pertaining to the Henry W. Pirkey Power Plant Unit-I, prepared by the U.S. Environmental Protection Agency, has been reviewed by the Budget and Planning Office and interested state agencies. Copies of the review comments are enclosed for your information and use. The State Environmental Impact Statement Identifier Number assigned to the project is 2-03-50-022.

The following specific comments are noted for your consideration.

1. The Texas Department of Agriculture notes that due to the large amount of acreage to be impacted by the proposed project, that the pine-hardwood forest area will be adversely affected. In addition, the Department expresses concern for the potential creation of acid rain as a result of the proposed project.

2. The Texas Parks and Wildlife Department comments that there is a significant discrepancy between the number of acres of wetlands identified by the consultant as compared to the number of acres of wetland recognized by the Army Corps of Engineers. The Department recommends that the Army Corps of Engineers' count be accepted.

3. Allowing for the natural invasion of shrubs and the supplemental planting of shrubs in the right-of-way would be preferable to the planned seeding of grasses and legumes, notes the Texas Parks and Wildlife Department.

4. Postponement of the mining of bottomland hardwoods and other wetlands until last would be beneficial to wildlife, notes the Texas Parks and Wildlife Department.

SAM HOUSTON BUILDING • P. O. BOX 13561 • AUSTIN, TEXAS 78711

The Budget and Planning Office appreciates the opportunity to review this project. If we can be of any further assistance during the environmental review process, please do not hesitate to call.

Sincerely,

William C. Hamilton, Manager
General Government Section
Budget and Planning Office

msh

Enclosures: Comments by Texas Department of Agriculture
Texas Air Control Board
State Department of Highways
and Public Transportation
Texas Historical Commission
Texas Parks and Wildlife Department
Texas Department of Water Resources

RESPONSE TO COMMENTS

FROM:

Office of the Governor
P.O. Box 18561
Austin, Texas 78111

4 May 1982

Comment	Response
1.	A response is provided on page II-32 of the Final EIS.
2., 3., and 4.	Responses are provided on page II-18 of the Final EIS.

United States Department of the Interior

OFFICE OF THE SECRETARY
WASHINGTON, D.C. 20240

ER 82/572

MAY 26 1982

Mr. Clinton B. Spotts
Regional EIS Coordinator
U.S. Environmental Protection Agency
Region 6
1201 Elm Street
Dallas, Texas 75270

Dear Mr. Spotts:

We have reviewed the draft environmental impact statement for the Henry W. Pirkey Power Plant, Unit No. 1 and South Hallsville Surface Lignite Mine Project; South Hallsville, Harrison County, Texas and have the following comments.

General

We are concerned that the timing of the NEPA process as administered by the Environmental Protection Agency does not provide adequate consideration of project alternatives or actions to protect environmental resources. Substantial work has been completed on the power plant site, cooling reservoir, and transportation and conveyance facilities prior to the development of the draft EIS.

Since the applicants have either completed or begun construction of their preferred alternatives, we believe the usefulness of the EIS document and its ability to assist in project planning is extremely limited. Therefore, identification and implementation of post-construction mitigation measures to offset the adverse impacts of the preferred alternatives should be stressed during the development of the final EIS and project plans.

We recommend that the location of the power plant should be added to figure 3-15.

1. No Action Alternative. We believe the evaluation of the "no action alternative" is a moot point and should be restructured. The applicants are currently proceeding with construction of their preferred alternatives; therefore, evaluations should stress the implementation of measures to mitigate the adverse impacts of the project on fish, wildlife, and related environmental resources.

2. Intake Structure Design and Operation. We believe the makeup water intake structure on Big Cypress Bayou has the potential for seriously impacting stream fisheries. The Texas Parks and Wildlife Department has previously indicated that Big Cypress Bayou below Lake O'the Pines is a significant stream fishery for native species, hybrid striped bass, and striped bass. The construction of an off-channel, pump station in the bayou's oxbow will serve to attract migratory fish species into the intake screens, especially during peak spawning periods and adequate stream flows.

We do not agree with the statements on page 4-140 that "the shore area around this structure is not expected to be an area of high biological productivity, particularly with respect to fish spawning or nursery waters" and that "impingement and entrainment of aquatic organisms is expected to be minimal." It should also be noted that the Fish and Wildlife Service does not believe that the Corps of Engineers' Section 404 permit issued for this intake will adequately protect the stream fisheries. Nine recommendations were made by the Fish and Wildlife Service to the Corps in a letter dated August 6, 1980, regarding measures necessary to protect the aquatic biota during construction and operation of the intake structure. Most of these recommendations were not accepted by the Corps. We continue to believe that the intake should be redesigned or operational features compatible with reduced fishery losses should be incorporated into project plans.

Requests for future technical assistance or clarification of Fish and Wildlife Service concerns on this project should be directed to the Ecological Services Field Office, Fish and Wildlife Service, 819 Taylor Street, Room 9A33, Fort Worth, Texas 76102, (FTS 334-2961).

3. Cooling Reservoir Operation. The statement implies on page 4-139 that the Texas Parks and Wildlife Department is expected to stock and manage the cooling reservoir for recreational fishing. It should be noted that the applicants have not adequately consulted with either the State or the Fish and Wildlife Service with respect to needed fisheries management practices. The cooling reservoir basin has been almost entirely cleared of timber and structure necessary for fish cover and reproduction. The lack of a preimpoundment fisheries management plan will require intensive management of the reservoir to sustain an acceptable sport fishery.

4. Flood Prevention Levees. We note on pages 3-101 and 4-103 that levees are proposed in the southern portions of the project area to protect against flooding from the Sabine River. It should be recognized that the floodplain, wetlands, and associated bottomland hardwood forests of the Sabine River provide valuable fish and wildlife habitats. Should the Corps of Engineers require a Section 404 permit for levee construction, as stated on page 4-103, the Fish and Wildlife Service would likely seek conditioning of the permit to avoid, mitigate, or restore adversely impacted habitats. The final statement should provide additional information on the quantity and quality of floodplain, wetlands, and bottomland forests to be impacted by the levees and detail the scope of work proposed for these areas.

5. Fish and Wildlife Resources

The importance of bottomland and wetland habitats should be discussed in greater detail. The water quality functions of these wetlands were not discussed and the impacts of their loss neglected.

The draft EIS states that waterfowl are an important recreational resource in the area but only mentions the blue-winged teal as a wetland associate. Wetlands described in the project area should provide wintering grounds for several species of waterfowl. The roles of wintering habitat and food supply for migrating waterfowl were not discussed. Although the project area seems to be suitable for wood duck nesting there was no discussion of this species.

6. Cultural Resources

The final statement should include a commitment by the Environmental Protection Agency to have the inventory and evaluation of significant cultural resources completed within the entire impact area. Mitigation measures concerning impacted cultural resources should be addressed in the Memorandum of Understanding. However, the current status of the proposed cultural resources Memorandum of Agreement should also be discussed.

MINE AREA

7. Air Quality

On page 4-68 on Table 4-14, the annual NAAQS value for TSP should be 60 ug/m^3 and not 75 ug/m^3.

On page 4-69 in Section 4.3.2 and 4.3.4, it is unclear whether the concentrations presented include baseline values. If so, the increment plus baseline should be included and compared to NAAQS.

8. Impact of Fugitive Emissions

On page 4-82 the estimated fugitive emissions from the mine should be expressed. The conclusion that impacts to air quality are minor needs to be supported by expressing the underlying assumptions. Paragraph 4 should be corrected so that the mine is not using BACT as implied on page xiii.

9. Vegetation

The vegetation section should discuss the effects of major changes in plant communities. For example, woodlands will be destroyed and restored to improved pastureland. The woodland slows surface wind, provides a cooling effect on the area, and protects the soil from erosion, thus protecting water quality.

10. Hydrology

The final statement should include a discussion on mitigating measures (such as an ongoing maintenance program) to prevent permanent sedimentation ponds from filling with sediment and possible failure. In addition, a discussion on the accessibility of the permanent ponds for post-mining uses should be included.

The Environmental Consequences Section should discuss the impacts of a straight stream replacing a meandering stream channel. Energy dissipators cause increased turbulence and thus increase erosional processes. If these dissipators are not designed to withstand undercutting from the forces of a large (100 year or more) storm event, then the channel may be quite unstable. Also, the natural meandering channel has dynamic properties which would be difficult to simulate with a straight channel.

11. Probable Losses of Wildlife Habitat

The draft EIS contains a good discussion of how displaced species must compete for resources in adjacent habitat and how habitat will be disturbed in parcels. However, this discussion should explain that most, if not all, of the woodland habitat disturbed in the area of the mine will not be restored. The landowner preference to have pasture as a post-mining land use will mean that only those species adapted to pasture will colonize such reclaimed land. Species diversity will change accordingly and populations will depend on grazing pressure and pasture condition. For all intents and purposes the reduction in numbers of woodland species should be considered permanent unless adjacent undisturbed woodland habitat is enhanced. As a result, the recreational opportunities offered by the affected species will be lost as populations are reduced.

12. Geology

It would be useful on page 3-85 to have a more detailed discussion of the geology including the coal beds located in that area. Some of these items are in the Environmental Consequence Section but more properly belong in the Description of Alternatives. A geologic cross section would be most helpful. The following items should be included in the geologic discussion: All seams present, including information on thickness, continuity, quality, stratigraphic dip and strike; A brief discussion of the depositional history and geologic age; A discussion of the coal seams as aquifers should be included in the "Environmental Consequences of Alternatives on the Affected Environment" and should address impacts on water quality.

13. Cultural Resources

A brief overview in the Affected Environment Section presenting what is known about the history and prehistory of the mine area is necessary. This would provide a perspective in which to view the rest of the cultural resource treatment. The discussion of the various surveys already conducted should be expanded to more fully present what was found, age of the finds, and importance or nonimportance to the area's history or prehistory.

We hope these comments will be helpful to you in the preparation of a final statement.

Sincerely,

Bruce Blanchard

Bruce Blanchard, Director
Environmental Project Review

RESPONSE TO COMMENTS

FROM: U.S. Department of the Interior
Office of the Secretary
Washington, D.C. 20240

25 May 1982

Comment	Response
General	Since construction completed and underway has impacted a relatively small area in comparison to the total scope of this project's environmental review, and the construction to date has been completed at SWEPCO's own risk, EPA does not agree that the usefulness of the EIS is limited. The location of the power plant has been added to Fig. 3-15 (see page III-8 of this document).
1.	The consequences of "No Action" are different in every project and seldom is this alternative assessed literally. In this case, it would be inaccurate not to present the construction impacts that have already occurred at the plant site.
2.	Page 4-140 of the Draft EIS has been revised to reflect the comment. See page III-32 of this document.
3.	Concur. Since the majority of the reservoir bottom has already been cleared, available fishery management options are limited. However, the applicant has been and is currently working with TPWD to develop a fishery management plan for the cooling reservoir. Artificial tire reefs are being placed in the reservoir to partially offset the loss of timber for fish cover. (See TPWD letter of 22 April 1982 on page II-17 of this document).
4.	The initial wetlands determination by the Fort Worth District of the USCE encompassed the perimeter of wetlands on the project site (see page III-17 of this document). Although levees will have to be constructed in the Sabine River floodplain for later mining operations (around the year 2000), no final designs have been developed. Preliminary arrangement of levees indicate that approximately 28 acres of wetlands will be directly and adversely impacted by construction, and approximately 796 acres of wetlands behind the levees could be indirectly and adversely impacted through interruption of surface water flow. Should the USCE require a Section 404 permit for levee construction, a detailed wetlands determination will likely be conducted to quantify the extent of wetlands (and bottomland forests that meet USCE wetlands criteria).

RESPONSE TO COMMENTS

FROM: U.S. Department of the Interior
Office of the Secretary
Washington, D.C. 20240

25 May 1982

Comment	Response
	Appendix D of this Final EIS contains a preliminary Section 404(b)(1) analysis.
5.	Concur. Wetland systems also can function in the maintenance and improvement of surface and subsurface water quality because the physical and biological processes within wetlands neutralize and absorb or metabolize waste materials in waters which pass through. This function is analogous to the operation of a conventional sewage treatment plant in that silt, sediments, and potentially toxic metals are trapped, organic matter is broken down by microorganisms, sulfates are reduced, and nitrates are broken down by bacteria. It is clear that this wetland function will be reduced temporarily or completely eliminated during and immediately following mining due to interference with the hydrologic system, soils, and biota of the wetland areas. The long-term effect of water quality changes from disturbances to wetlands will relate to the effectiveness of the reclamation and wetland restoration programs. If reclamation is moderatley successful, no significant long-term change from existing water quality conditions is expected. Short-term changes will result in degradation of water quality conditions downstream from the disturbed wetlands (primarily from sedimentation). These adverse effects are expected to be of short duration. If wetland restoration is not successful, the long-term effects are difficult to predict, but the worst-case analysis would indicate a complete loss of wetlands communities on the site with resultant adverse impacts on water quality conditions downstream. EPA concurs that the wetlands in the project area should provide wintering grounds for several species of waterfowl. Waterfowl species observed in the project area during baseline ecological studies included the Mallard (Anas platyrhynchos), Blue-winged Teal (Anas discors), Green-winged Teal (Anas crecca), Wood Duck (Aix sponsa), and Ring-necked Duck (Aythya collaris) (EH&A, 1977b). The information presented on p. 4-124 of the Draft EIS has been revised to reflect the roles of wintering habitat and food supply for migrating waterfowl and suitability for Wood Duck nesting; see page III-26 of the Final EIS.

RESPONSE TO COMMENTS

FROM:
U.S. Department of the Interior
Office of the Secretary
Washington, D.C. 20240

25 May 1982

Comment	Response
6.	A Memorandum of Agreement (MOA) to avoid or minimize additional adverse impacts to cultural resources has been made a NPDES permit condition. This MOA, which has been signed by the Texas SHPO and EPA and ratified by the chairman of the Advisory Council, is included in Appendix C of the Final EIS.
7.	The NAAQS primary annual geometric mean for TSP is $75 \mu g/m^3$. The secondary annual geometric mean for TSP is $60 \mu g/m^3$ and is used as a guide for achieving the secondary 24-hour standard (40 CFR, Part 50). See Table 4-13, page 4-67 of the Draft EIS. Page 4-69 (Sec. 4.3.2) discusses increment consumption which should not be confused with or compared to the NAAQS. In Sec. 4.3.4 ground level concentrations are discussed. Predicted air quality concentrations have been determined by adding the modeled power plant concentrations to the monitored baseline concentrations (see Table 4-15 on Page 4-76).
8.	Pages III-4, III-5 and III-15 of the Final EIS have been revised to reflect these comments.
9.	Concur; these additional effects of major changes in plant communities have been included in the assessments on pages III-23 of the Final EIS.
10.	Section 4.2.2.4 (page 4-55) of the Draft EIS has been revised to incorporate the comment. See page III-13 of this document.
11.	Concur. The assessment on page 4-130 of the Draft EIS has been revised to reflect the comment; see page III-29 of the Final EIS.

RESPONSE TO COMMENTS

FROM: U.S. Department of the Interior
Office of the Secretary
Washington, D.C. 20240

25 May 1982

Comment	Response
12.	Some of the specifics on the coal resources were among the items in the EIS that were reduced as a result of the scoping process on this project. More specific data on these and other subjects have been provided in 15 Technical Reference Documents, which were available for review in the project area, in EPA's Region 6 Office, and on request by interested parties. Lignite seams do not provide a source of ground-water supply in the project region and therefore were not considered in the analysis of water-quality impacts.
13.	A brief overview of the history and prehistory of the mine area has been included in the Final EIS. See page III-33 and III-34. Additional references have been included in the Final EIS (see pages III-35 and III-36).

OFFICE OF THE GOVERNOR

WILLIAM P. CLEMENTS, JR.
GOVERNOR

RECEIVED
JUL 6 1982
GES

June 28, 1982

Mr. Clinton B. Spotts, Regional EIS Coordinator
U.S. Environmental Protection Agency, Region VI
1201 Elm Street
Dallas, Texas 75270

Dear Mr. Spotts:

The Budget and Planning Office recently conducted a review of the Draft Environmental Impact Statement pertaining to the Henry W. Pirkey Power Plant Unit I prepared by the U.S. Environmental Protection Agency. The State Environmental Impact Statement Identifier Number assigned to the project is 2-03-50-022.

Subsequent to the completion of the review, we have received additional comments. Those comments are enclosed for your information and use.

It is hoped that these delayed comments will be useful to you in your decision-making process on this project. If this office can be of further assistance, please do not hesitate to call.

Sincerely,

William C. Hamilton

William C. Hamilton, Manager
General Government Section
Budget and Planning Office

ms

Enclosures: Comments by Texas Department of Health

SAM HOUSTON BUILDING • P. O. BOX 13561 • AUSTIN, TEXAS 78711

TEXAS SESQUICENTENNIAL 1836-1986

Texas Department of Health

Robert Bernstein, M.D., F.A.C.P.
Commissioner

1100 West 49th Street
Austin, Texas 78756
(512) 458-7111

Robert A. MacLean, M.D.
Deputy Commissioner
Professional Services

Hermas L. Miller
Deputy Commissioner
Management and Administration

June 8, 1982

Jarvis E. Miller, Ph.D., Director
Governor's Office of Budget & Planning
P. O. Box 13561, Capitol Station
Austin, Texas 78711

RECEIVED
JUN 15 1982
Budget/Planning

Attention: General Government Section

Subject: Henry W. Pirkey Power Plant
Surface Lignite Mine Project
Unit 1/South Hallsville
Harrison County, Texas
Governor's Office of Budget and Planning
EIS No. 2-03-50-022

Dear Dr. Miller:

The Draft Environmental Impact Statement (EIS) for the Henry W. Pirkey Power Plant--Unit 1/South Hallsville--Surface Lignite Mining Project--Harrison County, Texas has been reviewed for its public and environmental health implications. The Report was prepared by the U. S. Environmental Protection Agency, Region 6; it is dated March 1982. The following comments are offered to assist in the evaluation of the proposal.

Section 4.3.4.1, Plant Site, Radioactive Emissions contains a number of statements unsupported by hard data. The yearly 1.8 millirem dose rate to individuals seems low. Assuming 5 ppm uranium, the activity of the lignite will be 3.4 pCi/gm U-nat and 1.7 pCi/gm Ra-226 (disregarding other daughters). This yields a yearly stack emission of:

$$\begin{aligned}&3.4 \text{ pCi/gm} \times 454 \text{ gm/lb} \times 2000 \text{ lb/ton}\\&\times 2.8 \times 10^{6} \text{ tons/yr} \times 10^{-12} \text{ Ci/pCi} \times .015 \text{ (efficiency)}\\&= .13 \text{ Ci/yr of U-nat}\\&\text{and } .07 \text{ Ci/yr of Ra-226}\end{aligned}$$

Radon - 222 emission calculations for the stock piled lignite are:

$$0.2 \times 1.7 \text{ pCi/gm} \times 12 \text{ days} \times .181\text{/day} \times 2.8 \times 10^{6} \text{ tons/year} \times 2000 \text{ lb/ton} \times 454 \text{ gm/lb} \times 10^{-12} \text{ Ci/pCi} = 1.88 \text{ Ci/year,}$$

1.

0.2 = emanating power
1.7 pCi/gm = Radium concentration
.181/day = Radon decay constant
12 days = storage time on ore pad

There are a number of other source terms; these should be calculated and incorporated into a dispersion and dosimetry modeling program (such as MILDOS) to generate an accurate dose assessment.

A typical value of 1-5 ppm uranium is presented, but unsupported. Minimal data should include the number and location of samples taken and sample results. It has been our experience that uranium concentrations vary greatly in relatively proximal samples. Lignite in South Texas ranges to greater than 1000 ppm uranium, not 20 ppm as stated.

2. The only alternative discussed with regard to ash disposal involved subsurface disposal with subsequent surface reconstruction. There are currently a number of procedures utilizing ash:

1. as a 20% replacement in Portland cement
2. for road base and dam embankment soil stabilization
3. for soil sealing above hazardous waste disposal sites
4. as a neutralizer for acid ponds and sour soil
5. for post-hole setting.

Though it currently may not be the intent of Southwestern Electric Power Company (SWEPCO) to pursue these alternatives, it is felt that they should be addressed.

3. The hydrological and geological portions of the Draft EIS, while providing a good general overview of the project, present only minimal technical data. Much of the site specific data we would be interested in reviewing (borings, resistivity surveys, procedures, specific results, etc.) is contained in other referenced reports, (i.e. the hydrology and geology is not written to stand alone). Also, the inclusion of a section on seismology is strongly advised.

4. We agree with the EIS that certain portions of the 24,768-acre project area consisting of riparian woodland, mature upland hardwood forest, bogs, and other wetlands will be subjected to long-term adverse impact. Also, that even with proper reclamation (contouring, vegetation, etc.),

it will be many decades before habitat and species diversity is again developed on the site through natural processes and that bog areas, which are associated with unusual plant communities, have low probability of return. While this Department does not have direct responsibility for the loss of agricultural land resources, we are concerned that the cumulative effect of continued conversion of land presently producing food, feed, and fiber will ultimately result in a reduced agriculture capability--this, in turn, will have an adverse effect on public health.

The Texas Department of Health (TDH) appreciates the opportunity to review and comment on the Henry W. Pirkey Power Plant, Surface Lignite Mine Project.

Sincerely,

David M. Cochran, P.E.
Associate Commissioner for Environmental
and Consumer Health Protection

DLH:fhk

cc: Budget and Planning Division, TDH
Water Hygiene Division, TDH
Bureau of Radiation Control, TDH
Public Health Region 7, TDH

RESPONSE TO COMMENTS

FROM: Texas Department of Health
P.O. Box 13561
Austin, Texas 78761

July 28, 1982

Comment No. Response

1. The statements presented in the Draft EIS Sec. 4.3.4.1, Plant Site, Radioactive Emissions, are supported by hard data. The maximum expected individual dose commitment of 1.8 millirems per year was estimated using results from AIRDOS-II dispersion and dosimetry modeling. The draft EIS failed to mention that the dose commitment was estimated based on a period of 50 years. The dose rate of 1.8 millirems per year, presented in the draft EIS, is in actuality the calculated dose commitment. An average value of 2.6 ppm uranium in the fuel was determined based on laboratory analyses of 62 core samples of the lignite from the proposed mine (Paul Weir Company, 1978). This value was used to estimate the presented dose commitment.

The typical values of 1 to 5 ppm uranium found in the Wilcox Formation, the formation from which the lignite will be mined, were presented only for informational and comparative purposes, as was the South Texas lignite concentration values. We concur that uranium concentrations in South Texas can range to greater than 1,000 ppm, however, as stated in Sec. 4.3.4.1 typical uranium concentration values in South Texas lignite range from 2 to 20 ppm (White, 1979). The South Hallsville lignite, which would be mined in Northeast Texas (Wilcox Formation), has lower concentration of uranium than South Texas lignite.

The estimate of the maximum expected individual dose commitment of 1.8 millirems per year is based on worst-case assumptions and, therefore, represents an upper limit estimate. As stated in Sec. 4.3.4.1, the estimated dose commitment presented here was based on worst-case assumptions. The assumptions used in the applied algorithm are that the individual would have to live at a single location 500 meters from the stack, and grow and consume all his food at that same location for one year. The algorithm used gave no credit for stack heights greater than 100 meters, a result of claims that ground-level concentrations have little dependence on stack height when continuous washout factors are used (McBride, 1977 and 1978). Periods of intermittent rainfall were averaged to be used as a scaled-down, one-year continuous rainfall. This technique overestimates the action of intermittent rainfall activity as a washout process and leads

RESPONSE TO COMMENTS

FROM: Texas Department of Health
P.O. Box 13561
Austin, Texas 78761

July 28, 1982

Comment No.	Response
1. (Cont'd)	to an overestimate of the dosage (Slade, 1968; Christiansen, 1980). Based on the maximum estimated individual dose commitment of 1.8 millirems per year, the introduction of the proposed lignite power plant will cause only very small, if any, adverse health impacts resulting from the release of uranium and thorium decay series' radionuclides.
2.	Concur. Bottom ash produced by power plant operations will ultimately be removed from the plant property and sold, disposed of, or used onsite (Draft EIS, p. 3-69). Fly ash will be used to stabilize the dewatered SO_2 removal system sludge. The utilization of scrubber sludge is more limited than that of ash (Radian Corporation, 1978). The alternatives listed in the comment are suitable for the low sulfur, low heavy metals concentrations associated with coal fly ash properties. Although fly ash from lignite is presently being utilized as a by-product, through a federal exemption (45 Fed Reg 33120), studies are being conducted by Arthur D. Little, Inc. of Cambridge, Massachusetts to determine whether the fly ash should be classified as a hazardous waste. If it is designated as such, the disposal of fly ash will be regulated more stringently. SWEPCO prefers to dispose of the ash in a TDWR-approved designated landfill site until results of studies are available. While the alternative of using fly ash as an additive in Portland cement would be an environmentally safe disposal method, the pozzolanic properties of ash from lignite are not usually suitable for cement. The fly ash from lignite is not as consistent in its physical properties as is fly ash from coal. To be used as an additive in Portland cement, the fly ash must meet the ASTM C-150 standards.

RESPONSE TO COMMENTS

FROM: Texas Department of Health
P.O. Box 13561
Austin, Texas 78761

July 28, 1982

Comment No. Response

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3. Concur. A detailed presentation of the site hydrogeology baseline is contained in referenced source reports that are available for public review.

The permit area is located within an area of seismic risk labeled as zone I (U.S. Dept. of Commerce, 1970). This zone is characterized as an area where there exists a possibility of minor damage resulting from the occurrence of earthquakes. Historically, a series of moderate earthquakes centered along the Texas-Louisiana border area near Hemphill, Texas, approximately 80 miles south-southwest of the project area, occurred beginning on April 23, 1964. Intensities of the shocks were V or less on the modified Mercali scale. This scale measures the effects on people, man-made objects, and the earth's surface. Four moderately strong shocks affecting an area of about 26,000 km^2 in northeastern Texas extending into Louisiana and Arkansas occurred on March 19, 1957. Maximum intensity was about V in the Marshall-Gladewater area, with damage limited to a few broken windows and overturned objects. The strongest earthquake recorded in the region occurred on January 8, 1891 and had an intensity of VII. The epicenter of this quake was in the vicinity of Rusk, Texas (Von Hake, 1977). Based on the geologic and seismic history of the region, it is assumed that earthquakes of amplitude such to cause signficant damage will not likely occur in the area of the project.

U.S. Department of Commerce. 1970. Seismic risk map of the United States. NOAA Environmental Services Division. Publication 41-1.

Von Hake, C. A. 1977. Earthquake history of Texas. USGS Earthquake Information Bulletin. Vol. 9, No. 3.

4. No response necessary.

DEPARTMENT OF THE ARMY
FORT WORTH DISTRICT CORPS OF ENGINEERS
P O BOX 17300
FORT WORTH TEXAS 76102

SWFOD-O

14 July 1982

Mr. Clinton B. Spotts
Regional EIS Coordinator
U.S. Environmental Protection Agency
Region VI
1201 Elm Street
Dallas, Texas 75270

RECEIVED
JUL 16 1982

Dear Mr. Spotts:

My staff has completed its review of the Draft Environmental Impact Statement (DEIS) and Section 404(b)(1) Evaluation Report for the Henry W. Pirkey Power Plant Unit 1/South Hallsville Surface Lignite Mine Project in Harrison County, Texas. The following comments on the DEIS and 404(b)(1) evaluation are offered in addition to those contained in our letters of 30 July 1981 and 20 April 1982.

1. The DEIS refers to the first mining block but does not provide a map of the block as a reference. Does the first mining block include all work to be accomplished between 1984-1990 as specified in Figure 3-15?

2. Section 4.7.1.7, Recreation Facilities and Aesthetics states that the mining site will be one mile from the portion of the Sabine River included in the Nationwide Inventory as a potential component of the National Wild and Scenic Rivers System. This segment should describe in more detail potential effects of the project upon the Sabine River. How will the levees effect the aesthetics of the river and will the mining be visible from the Sabine?

3. The following comments are in reference to your 404(b)(1) Evaluation.

a. Subparts C-E & H should be revised to include a short summary of pertinent facts from the DEIS. Subparts F and G have been written this way and are more readable.

b. Subpart B. 4: The date of the issuance of the water quality certification should be included.

c. Subpart D: This section references the appropriate portions of the DEIS for discussion of impacts on fish and wildlife resources. These portions of the DEIS do not discuss the impacts of the mining on terrestrial wildlife.

Somewhere there needs to be a discussion of changes in animal populations and diversity resulting from mining and reclamation activities including filling of stream or wetland habitats. In addition, a summary of the results of the biological assessment for endangered species at the site should be included in Subpart D when available.

d. I am inclosing a revised 404(b)(1) form for your use along with your original draft. Note that Subpart H now applies only to those actions not already proposed by the applicant. The applicant's current proposals to minimize adverse effects (such as reclamation, facility design, etc.) should be referenced in the appropriate Subpart.

e. It will be necessary to add a statement of compliance with the Guidelines to the evaluation. Such a statement should be in accordance with Inclosure 2.

4. The following general comments are presented in reference to the cultural resources portions of the DEIS.

a. Work should be conducted, assessed and reported in accordance with the requirements and standards in 36 CFR 60, 63, 66, and 800, 40 CFR 1500-1508, Proposed Standards of the Council of Texas Archeologists, Treatment of Archeological Properties: A Handbook (Advisory Council on Historic Preservation) and other pertinent regulations.

b. Federal Agencies having permitting and licensing responsibilities are required under Section 106 of the National Historic Preservation Act, as amended and other pertinent legislation to consider the effects of their actions upon National Register of Historic Places (NR) or eligible properties. The DEIS should include a discussion of the archeological and historical resources in the project area, and the impacts, if any, of the proposed project upon these resources.

c. According to the DEIS, it appears EPA may have violated Section 106 and other legislation by issuing a permit (xi) without consideration of the impacts of the proposed work on NR, or eligible properties. The result of the work conducted was evidently the total destruction of at least one cultural property that was potentially eligible for the NR (xvi, 4-146). Therefore, actions taken to date preclude alternative courses of action for cultural resources in portions of the project area. In addition, the required coordination with the State Historic Preservation Officer (SHPO) and the Advisory Council on Historic Preservation (ACHP) has not been conducted in the appropriate sequence. This would have allowed the consideration of their comments prior to the destruction of a portion of the existing data base.

d. The description of the existing cultural and historic environment does not provide an adequate or clear description. Discussion of known properties should not include specific locational information. However, topographic setting; temporal affiliation; presence or absence of subsurface deposits; NR eligibility, or ineligibility; areal extent and relationship to the proposed project should be included. This information should be concise, and provide perspective on the culture history of the area. Section 4.6.1 of the DEIS is inadequate in this regard.

e. In discussing the sample survey and predictive model (4-143 - 4-144), the
(1) selection and criteria for the sampled area, the statistical basis for the predictive model and the variables utilized should be discussed.

(2) The word "survey" is utilized variously throughout this section (4.6) to mean pedestrian survey, literature survey or both. This should be clarified.

(3) The procedures for removal or avoidance of the 14 cemeteries mentioned (4-143) should be detailed, as should the procedures for locating any unmarked graves and providing an adequate buffer zone during construction.

(4) The survey results for the dragline erection site (4-145) are cited as a personal communication (LaVardera, 8-4). This is inappropriate. Even small area surveys require a report which meets the pertinent regulations and the report standards of the Council of Texas Archeologists.

f. In the assessment of project impacts, the word "commitment" (4-145, 4-149) is evidently used to mean destruction. If the sites discussed
(1) will be destroyed, it should be clearly stated. Adverse impacts upon a portion of the area have already occurred (4-145). The discussion of impacts mixes tenses and confuses this issue, stating possible impacts (4-149, 4-150) instead of possible impacts in addition to those that have already occurred.

(2) It is not clear why the predictive model supposedly developed for the project area couldn't be utilized to provide better information on project impacts in the various project areas; railroad spur, plant site (already impacted) transmission lines, etc. (xvi, 4-146, 4-147).

(3) Impacts from construction are considered adverse (xvi, 4-149, 4-150) and therefore the SHPO, EPA and ACHP should develop a Memorandum of Agreement (MOA). The MOA should be published in the Final EIS as evidence of EPA's compliance with Section 106. The MOA would include mitigation measures, if necessary, and procedures to be followed should cultural deposits be discovered during construction. The MOA, and EIS information can be developed to accommodate the phased mining plan.

SWFOD-O
Mr. Clinton B. Spotts

14 July 1982

Thank you for the opportunity to comment on this project. If you have further questions concerning this letter, please contact Ms. Vicki Goodknight or Ms. Daphne Derven at 817-334-2681.

Sincerely,

Allie J. Majors

3 Incl
As stated

ALLIE J. MAJORS, P.E.
Chief, Operations Division

RESPONSE TO COMMENTS

FROM: Department of the Army
Ft. Worth District, Corps of Engineers
Fort Worth, Texas 76102

July 28, 1982

Comment No.	Response
1	Yes, the first mining block includes activities undertaken from 1984-1990. Fig. 3-15 from the Draft EIS has been revised to show the first 5-year mining block. See page III-8 of the Final EIS.
2	The deeply cut channel and bank vegetation will minimize visual access of the levee and mining activity. During normal flow periods, boaters on the Sabine River will not be exposed to a view of the proposed project activities. During high flow periods, the levee may be visible from the channel for a brief duration. Currently, the Texas Eastman levee, approximately 5 miles from the southwestern boundary of the site, is visible from the river channel. Construction of the levee will create a short-term adverse impact due to noise from machinery; mining activities approximately one mile from the river will take place in approximately 1996 and continue through the year 2000. Noise impacts will be minimal. Mining activities are not anticipated to introduce visual, audible, or other sensory intrusions which will alter the existing setting of the river.
3a-e	The 404(b)(1) Evaluation Form has been revised. See Appendix D.
4a	Comment noted.
4b	Comment noted.
4c	At the time of public notice (i.e., January 1978) for issuance of the PSD Permit to SWEPCO on the H. W. Pirkey Power Plant (PSD-TX-64), the PSD program was still undergoing major program and policy changes. These included amendments to the Clean Air Act for PSD in August 1977, changes by EPA in PSD permit procedures in October 1977, litigation procedures on the PSD program until March 1978, and new PSD regulations promulgated in June 1978. In addition, until the Consolidated Permit Regulations were issued on 19 May 1980, EPA had little guidance on procedures

RESPONSE TO COMMENTS

FROM: Department of the Army
Ft. Worth District, Corps of Engineers
Fort Worth, Texas 76102

July 28, 1982

Comment No.	Response
4c (Cont'd)	for notifying other Federal agencies on PSD permit actions. The Region 6 Office is presently implementing procedures to insure appropriate agencies are notified of proposed PSD permit actions.
4d	A more detailed discussion of cultural resources of the project area including topographic setting, temporal affiliation, presence or absence of subsurface deposits, National Register sites, etc. is presented in "Cultural Resource Survey - Phase I Reconnaissance of South Hallsville Project" (Dibble, 1977), "A Preliminary Assessment of the Historical Resources of the South Hallsville Project Area, Harrison County, Texas" (EH&A, 1978), and "Cultural Resources Survey - Phase II, Plant Site - Cooling Pond Survey, Mine Area Predictive Model, South Hallsville Project" (EH&A, 1979). These documents are available for public review. Further, see Final EIS Section III, page III-33 for an overview of the cultural history of the area.
4e(1)	A detailed discussion of the development of survey methodology and criteria for selection of areas sampled is contained in "Cultural Resources Survey, Phase II Plant Site/Cooling Pond Survey, Mine Area Predictive Model, South Hallsville Project" (EH&A, 1979). This document, as other referenced resource documents, is available for public review.
4e(2)	Concur. When the word "survey" is used in conjunction with percent coverage (i.e., 100 percent), a pedestrian survey is implied.
4e(3)	SMC will avoid all cemeteries; none will be relocated. In compliance with RRC surface mining regulations, mining will not take place within 100 feet of cemeteries and access will be maintained.
4e(4)	Concur. A report presenting the results of the survey of the dragline erection pad site has been submitted to the SHPO (La Vardera, 1982). At the time the Draft EIS was being prepared, the LaVardera report was being written. See response to the Texas Historical Commission on page II-28.

RESPONSE TO COMMENTS

FROM: Department of the Army
Ft. Worth District, Corps of Engineers
Fort Worth, Texas 76102

July 28, 1982

Comment No.	Response
4f(1)	Concur, "commitment" = "destruction". Adverse impacts on a portion of the area (i.e., plant site, page 4-145) had already occurred prior to preparation of the Draft EIS. Section 4.6.5 (page 4-149 and 4-150) discusses potential future adverse impacts as a result of construction and subsequent operation of the power plant/mine project.
4f(2)	The predictive model was developed specifically for the proposed mine site area, taking into consideration specific features of environmental zones such as topography, streams, etc. within site drainage areas, etc. From areas investigated by a 100 percent pedestrian survey, predictions of the probability of site occurrence on similar environmental features within the mine boundaries were made. Investigations associated with transportive systems have been and will be coordinated with the SHPO to determine sensitive areas/methodologies for investigation.
4f(3)	Concur. A MOA between SHPO, EPA, and ACHP has been prepared. See Final EIS, Appendix C.

B. OTHER COORDINATION RELATING TO THE PROPOSED PROJECT

1. Federal Agencies

U.S. Fish and Wildlife Service - Section 7 Consultation As previously stated in Sec. 5.2.1 of the Draft EIS, EPA requested information concerning the presence of threatened and endangered species in the proposed project area. FWS responded by listing three species as potentially occurring (i.e., Red-cockaded Woodpecker, American Alligator, and the Bald Eagle). The potential for each of these species occurring on the project site has been previously assessed in Sec. 4.5.2.1 of the Draft EIS and pages I-8, I-9, III-24, III-25, III-27, and III-28 of this Final EIS.

Consultation with FWS for the purpose of developing a suitable methodology for satisfying the requirements of Section 7 of the Endangered Species Act occurred periodically from September through December 1981 (see Sec. 5.2.1 of the Draft EIS). In accordance with Section 7 of the Endangered Species Act, a Biological Assessment of the potential impacts to threatened and endangered species in the first 5-year mining block was prepared. As a result of this assessment, EPA determined there is "no effect" on the Red-cockaded Woodpecker, and a "may effect" situation exists for the American Alligator and Bald Eagle (see letter, p. II-64). This determination was reviewed by the U.S. Fish & Wildlife Service (FWS) in Albuquerque, N.M. The FWS concluded that the proposed projects would not affect the Red-cockaded Woodpecker or American Alligator and is not likely to jeopardize the continued existence of the Bald Eagle (see Appendix E). The need for additional biological assessments covering the remaining mining blocks will be determined as future Federal permits are required. If EPA has a permit action, any necessary assessment on remaining mine areas should be complete in a timely manner to allow for informal or formal consultation procedures with the FWS.

USCE-Section 404/10 The power plant makeup water pipeline and intake structure Section 404/10 permit application has been approved by the Fort Worth District of the USCE (DOA permit SWF-80-MARION-280; see Sec. 5.2.2 of Draft EIS). Subsequent to the publication of the Draft EIS, the USCE requested that a Section 404(b)(1) Analysis be performed in accordance with 40 CFR Part 230 (Guidelines for Specification of Disposal Sites for Dredged or Fill Material). These guidelines provide criteria used in evaluating discharges of dredged or fill material under Section 404 of the Clean Water Act for the purpose of restoring and maintaining the chemical, physical, and biological integrity of waters of the United States through the control of dredged or fill material. Appendix D contains the result of this analysis based upon available information.

EPA-PSD In July 1979, SWEPCO submitted to the EPA information concerning the construction of the South Hallsville lignite mine. The purpose of this submittal was to obtain a determination of applicability of the EPA's prevention of significant air quality deterioration (PSD) rules to the proposed mine. In May 1980, SWEPCO submitted additional information regarding emission factors, location, ambient monitoring data, and control technology. The emission of fugitive particulate matter was one of the principal topics discussed in the 1980 submittal. After reviewing this information, the EPA determined that the mine would not be a major stationary source and that it was, therefore, exempt from PSD (see page II-65).

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION VI
1201 ELM STREET
DALLAS, TEXAS 75270

May 18, 1982

Mr. Gordon H. Hansen
Acting Deputy Regional Director
U.S. Fish and Wildlife Service
P.O. Box 1306
Albuquerque, N.M. 87103

Dear Mr. Hansen:

EPA, Region 6, has completed the biological assessment for the South Hallsville Project near Marshall, Texas which is enclosed for your review. This assessment was prepared to comply with Section 7 of the Endangered Species Act for all Federal actions on this project to the extent possible, including EPA's NPDES and PSD permits and the Corps of Engineers Section 404 permit(s).

As a result of this assessment, our determination is that there is "no effect" on the red-cockaded woodpecker, and a "may effect" situation exists for the American alligator and bald eagle. Therefore, this letter shall initiate a request for formal consultation on these Federal actions. For additional coordination, please contact me or Joe Swick at FTS 729-2716.

Sincerely,

Clinton B. Spotts
Regional EIS Coordinator

Enclosure

cc: George Vaught, Espey Huston & Assoc., Inc.
Jay Pruett, SWEPCO
David Barrows, Fort Worth Dist. COE

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION VI
1201 ELM STREET
DALLAS, TEXAS 75270

September 3, 1980

Mr. Jay A. Pruett
Environmental Coordinator
Southwestern Electric Power Company
P. O. Box 21106
Shreveport, Louisiana 71156

Dear Mr. Pruett:

The information which you submitted July 1979, regarding the construction of a surface lignite mine, has been reviewed. The purpose of this letter is to inform you of the applicability of Prevention of Significant Deterioration (PSD) regulations to Southwestern Electric Power Company's proposed surface lignite mine described in the PSD application (PSD-TX-273).

The mine as proposed, will provide fuel for the planned expansion (beginning 1983) of Southwestern Electric Power Company's adjacent existing electric generating plant (PSD-TX-64). Based on the previous PSD regulations (June 19, 1978), the new mine proposed by Southwestern Electric Power Company was defined as a modification to their existing power plant and therefore subject to the necessary permit requirements. However, the definition of "Source" has been redefined in the new PSD regulations promulgated on August 7, 1980.

Based upon the definitions in the revised PSD regulations (45 FR 52735), stationary source is defined as any structure, building, facility, or installation, which emits or may emit any air pollutant regulated under the act, which belongs to the same industrial grouping, located on one or more contiguous or adjacent properties, and are under the common control of the same person. Pollutant emitting activities which belong to the same "Major Group" (i.e. which have the same two digit Standard Industrial Code) are considered as part of the same industrial grouping.

The proposed surface lignite mine is classified in "Major Group" 12 according to the Standard Industrial Classification Manual, 1972, as amended by the 1977 supplement. The adjacent existing power plant, also owned by Southwestern Electric Power Company is classified in "Major Group" 40. Therefore, the proposed mine is now defined as a new lignite mine, rather than a modification to the existing power plant.

The proposed PSD regulations list 26 source categories for which fugitive emissions are to be considered when calculating potential to emit. The proposed surface lignite mine is not one of the 26 source categories and therefore fugitive emissions from the proposed source need not be quantified when calculating potential emissions. Since the only emissions from the proposed new mine are fugitive emissions, this new source will not have the potential to emit greater than 250 tons/year of any applicable pollutant regulated under the act. Therefore, the proposed South Hallsville surface lignite mine is not a major stationary source and therefore is exempt from PSD review requirements. However, this determination in no way exempts the new mine from any other necessary permit requirements including those of the Texas Air Control Board (TACB).

If you have any questions concerning this matter, please call Mr. Tom Diggs at (214) 767-1594.

Sincerely,

Jack Divita

Jack S. Divita, Chief
Air Programs Branch

cc: Eli Bell
Deputy Director, Prevention & Control
Texas Air Control Board
6330 Hwy. 290 East
Austin, Texas 78723

2. State Agencies

Texas Historical Commission Under Section 106 of the National Historic Preservation Act (NHPA) of 1966, as amended, the State Historic Preservation Officer (SHPO) was contacted concerning the proposed South Hallsville Project. The Notice of Intent was forwarded to the SHPO for review (10 July 1981). The SHPO staff concurred that compliance procedures for Section 106 of NHPA and the pertinent Federal regulations have only been partially accomplished (see letter of Notice of Intent Comment dated 11 August 1981 and Draft EIS Comment letter dated 30 April 1982). A Memorandum of Agreement (MOA) to avoid or minimize additional adverse impacts on cultural resources has been made a NPDES permit condition. This MOA, which has been signed by the Texas SHPO and EPA and ratified by the chairman of the Advisory Council, is included in Appendix C of the FEIS.

Texas State Department of Highways and Public Transportation The construction of the makeup water pipeline from Big Cypress Bayou to the power plant site will involve the crossing of seven State-maintained highways. Table 2-1 lists the highways and permit data for crossing by 36-inch pretensioned concrete cylinder pipe and casing. Subsequent to permit approval, SWEPCO requested 60-inch ASTM C 76, class III pipe be allowed for encasing the pipe in lieu of the casing shown on the permits; this was approved by SDHPT.

Mining operations will preempt a portion of a local road system; SWEPCO plans to construct a new road around the southern perimeter of the mine and has entered into an agreement with the SDHPT to conform to farm-to-market standards. After construction, SWEPCO will then turn over the road to the SDHPT. The agreement between SWEPCO and SDHPT is presented in Appendix G.

3. Local Agencies

During July 1982 meetings were held between SMC and the Harrison County Soil and Water Conservation District and an agreement was signed on 20 August 1982. The agreement is presented in Appendix F.

4. Public Hearing Summary

A Public Hearing on the Draft EIS was held at 7:30 p.m. on 27 April 1982 at the Marshall High School, Marshall, Texas. Approximately 20 persons attended the meeting. Mr. Jim Collins, EPA's hearing officer, provided the opening remarks and explained the purpose, objectives of, as well as the procedures for, the hearing. Mr. Joe Swick, EPA's EIS project officer, presented a brief summary of EIS events completed and projected to complete the NEPA process and environmental review. Mr. Rob Reid, EH&A's project manager, discussed the results of the impact analysis presented in the Draft EIS. Comments were requested by Mr. Collins for the record but none were made by anyone in attendance. The meeting was opened for questions and answers, and two questions were asked. The first question concerned the potential for acid rain and radioactive emissions. EPA responded by providing references to discussions on these topics in the Draft EIS. The second question concerned who should be contacted with potential problems occurring at some time in the future. EPA responded that it could be contacted for future problems.

TABLE 2-1

UTILITY CROSSING PERMITS FOR PROPOSED MAKEUP WATER PIPELINE FROM BIG CYPRESS BAYOU TO HENRY W. PIRKEY POWER PLANT*

Form	Highway No.	Control	Section	Maintenance Section No.	County
1023	FM 968	1575	2	6	Harrison
1023	SH 154	402	4	6	Harrison
1023	FM 2208	138	13	6	Harrison
1023	US 80	96	8	6	Harrison
1023	FM 3001	3041	2	6	Marion
1023	FM 449	640	6	5	Harrison
1082	IH 20	495	8	6	Harrison

* Notice of Proposed Installation - 5 March 1981.
Approval of Proposed Installation - 23 April 1981.

5. Other Coordination

SWEPCO requested EPA approval for commencement of limited construction on the South Hallsville Lignite Mine on 26 July 1982. EPA approved the request on 18 August 1982. SWEPCO's request and EPA's approval are presented in Appendix I.

6. List of Agencies, Organizations, and Persons to Whom Copies of the Final Statement are Sent

FEDERAL AGENCIES

U.S. Department of Transportation, Federal Highway Administration, Austin, TX
U.S. Department of the Interior, Office of the Secretary, Washington, D.C.
Department of Housing and Urban Development, Fort Worth, TX
Federal Emergency Management Agency Region VI, Denton, TX
U.S. Department Health, Education and Welfare; Public Health Service Center for Disease Control, Atlanta, GA
Office of Environmental Project Review, U.S. Department of Interior, Washington, D.C.
Federal Energy Regulatory Commission, Washington, D.C.
Advisory Council of Historic Preservation, Washington, D.C.
Office of Federal Activities, Washington, D.C.
U.S. Department of the Interior Geological Survey, Reston, VA
Office of Surface Mining, Denver, CO
U.S. Army Corps of Engineers, Fort Worth, TX and Dallas, TX
U.S. Department of Agriculture, Soil Conservation Service, Temple, TX

STATE AGENCIES AND ORGANIZATIONS

Director of Budget and Planning Office, Office of the Governor, Austin, TX
Texas Department of Highways and Public Transportation, Austin, TX
Texas Department of Water Resources, Austin, TX
Texas Parks and Wildlife Department, Austin, TX
Honorable Bill Clements, Governor of Texas, Austin, TX
Texas Air Control Board, Austin, TX and Tyler, TX
Department of Agriculture, Austin, TX
Texas Department of Health Resources, Austin, TX
Texas Historical Commission

INTERESTED ORGANIZATIONS AND INDIVIDUALS

James C. Conner, Marshall, TX

PART III

MODIFICATIONS AND CORRECTIONS TO THE DRAFT EIS

PART III MODIFICATIONS AND CORRECTIONS TO THE DRAFT EIS

Modifications and corrections to the Draft EIS as the result of changes by EPA, SWEPCO/SMC, or from comments by agencies or individuals are presented in this section. Table 3-1 provides an index to the pages from the Draft EIS that were revised.

TABLE 3-1

INDEX OF REVISIONS TO THE HENRY W. PIRKEY POWER PLANT UNIT-1/SOUTH HALLSVILLE SURFACE LIGNITE MINE PROJECT DRAFT EIS*

Draft EIS Page No.	Final EIS Page No.
xiii	III-4
xiv	III-5
1-5	III-6
3-7	III-7
3-81	III-8
3-126	III-9
3-130	III-10
4-43	III-11
4-46	III-12
4-55	III-13
4-82	III-15
4-96	III-16
4-97	III-18
4-99	III-19
4-113	III-21
4-114	III-22
4-118	III-23
4-121	III-24
4-122	III-25
4-124	III-26
4-127	III-27
4-130	III-29

TABLE 3-1 (Concluded)

Draft EIS Page No.	Final EIS Page No.
4-135	III-30
4-137	III-31
4-140	III-32
4-143	III-33
8-3	III-35
8-4	III-36
8-7	III-37
Appendix A	III-38
Appendix A	III-39
Appendix A	III-40
Appendix A	III-41

* Revisions on the following pages are indicated by a vertical line in the right margin.

Long-term adverse impacts on the ground-water system will be disruption of stratification in the saturated overburden; probable reduction in horizontal permeability and yield characteristics of overburden aquifer strata; probable increase in porosity and storage characteristics of overburden aquifer strata; and increase in dissolved solids concentrated in shallow ground-water systems. A slight recharge of ground water will occur in the vicinity of the power plant's cooling reservoir.

Long-term adverse surface water hydrologic impacts expected as a result of mining activities are alterations in peak runoff rates and volumes resulting from changes in the site topography, topsoil characteristics, vegetative cover patterns, and land uses. Major streams will be altered due to permanent rerouting, resulting in straighter stream channels and shorter flow lengths. Short-term adverse surface water impacts will occur from temporary increases in overland runoff from cleared areas, and increased transport of sediments and turbidity in receiving streams during periods of heavy rainfall and increased streamflow.

Air Quality

Short-term, localized, adverse air quality impacts will occur during project site preparation activities (e.g., clearing, burning, and construction). These impacts will be minor, with only occasional exceedances of normal background levels being realized. The principal air pollutants to be emitted during power plant operation are sulfur dioxide (SO_2), oxides of nitrogen (NO_x), and particulate matter from the proposed plant's stacks. Carbon monoxide (CO) and hydrocarbons (HC) will also be emitted in very small quantities. BACT will be applied to SO_2, NO_x, and total suspended particulates (TSP). Ground-level SO_2 concentrations resulting from power plant operations are predicted to be below threshold levels which may cause damage to sensitive plant species in the vicinity of the plant site. Trace radioactive emissions are expected to be below existing Federal standards protecting public health. Sources of fugitive dust emissions from the power plant include lignite and limestone handling, processing, and storage operations. Fugitive emissions will be the only air pollutant that will result from mine construction and operation. The mine will not have the potential to emit greater than 250 tons per year of any applicable pollutant and therefore is exempt from PSD review requirements. All reasonable air pollution control measures will be undertaken to prevent fugitive dust from either the power plant or mine from becoming airborne.

Sound Quality

Due to the large distances of noise-sensitive receptors from the proposed project facilities (greater than 2,800 feet) and the attenuation effects of surrounding topography and vegetation, only minor noise impacts will occur. Similarly, increased noise levels associated with operation of the proposed project will not have adverse effects on the surrounding area. Increased noise levels will be localized, of relatively short duration, and attenuated with distance from the source.

Ecology

Construction of the plant site and transportive systems has adversely impacted local biological communities by the direct elimination of vegetation/wildlife habitat. About 2,460 acres of vegetation/wildlife habitat were preempted by construction of the proposed power plant, cooling reservoir, pipeline corridor, and railroad spur. These areas consisted primarily of upland forest. A portion of an additional 1,451 acres (primarily upland forest) comprising the plant site ancillary activities area may be affected during construction and 86 acres will be cleared for transmission line ROW's, which will cause short-term adverse impacts.

During the life of the mine, approximately 10,545 acres of vegetation/wildlife habitat will be cleared. Some of the vegetation/wildlife habitat present in the 10,226-acre mine ancillary area will be cleared during the life of the mine. These areas consist primarily of upland forest and pasture.

Intermittent and perennial stream habitats and associated aquatic communities in the vicinity of the plant site, cooling reservoir, transportive system

TABLE I-1 (Concluded)

Permit, Regulation or Approval	Agency*
Compliance with the Wild and Scenic Rivers Act of 1968	NPS
Compliance with the National Energy Act of 1978	N/A
Compliance with the Federal Aviation Act of 1958	FAA
Railroad Commission of Texas Surface Mining Permit	RRC
Certificate of Convenience and Necessity (power plant)	TPUC
Construction Permit (power plant)	TACB
Operating Permit (power plant)	TACB
Appropriation of State Water Permits (power plant)	TDWR
Wastewater Discharge Permit	TDWR
Solid Waste Registration (power plant)	TDWR
Utility Crossing Permit	SDHPT

*Acronyms:

EPA - Environmental Protection Agency
USCE - U.S. Corps of Engineers
FWS - U.S. Fish and Wildlife Service
FAA - Federal Aviation Administration
SHPO - State Historic Preservation Officer
ACHP - Advisory Council on Historic Preservation
USDA - U.S. Department of Agriculture
NPS - U.S. Department of the Interior, National Park Service
RRC - Railroad Commission of Texas
TPUC - Texas Public Utilities Commission
TACB - Texas Air Control Board
TDWR - Texas Department of Water Resources
SDHPT - State Department of Highways and Public Transportation

transport long distances, it is nevertheless looked upon as an economical alternative when associated with a mine-mouth power plant such as the proposed power plant facility. However, the ever-increasing cost associated with the handling and long-distance transporting of western coal has compelled users to evaluate other alternatives. In addition, the environmental impacts associated with mining in western states may, in some cases, be more severe than in the Gulf Coast Region.

3.3.7 Nuclear

Nuclear power plants lack the kinds of air pollution associated with burning conventional fuels. The amount of fuel required for nuclear plants is small, and partial refueling is conducted only once or twice a year. Because of this, transportation costs are small, making the cost of a nuclear plant practically independent of its location. As such, it is a good fuel alternative. However, it does not seem wise to depend solely on limited sources of fuel as was done in the past with the use of gas and oil. Nuclear technology has come of age, yet is encumbered by high capital costs, lengthy lead time for siting, threatened moratorium (licensing uncertainties), escalating fuel costs, and lack of development of new fuel processing and waste disposal facilities. For these reasons, nuclear fuels were not considered a feasible choice for a power plant needed by 1985.

3.3.8 Hydroelectric

Hydroelectric generation of power is the most efficient power source currently feasible, but its use is greatly limited by the availability of sites that can provide high head, large discharge, large storage capacity, and proximity to load centers. An alternative method is the use of pumped storage where water is pumped to a higher reservoir during periods of low demand; however, pumped storage has very high construction cost and sites are limited.

The lack of availability of a suitable site, the increased demand on available water for existing uses, and the need for large generating capacity from a single site precluded the further consideration of hydroelectric generation of power to meet system demands by the mid 1980's.

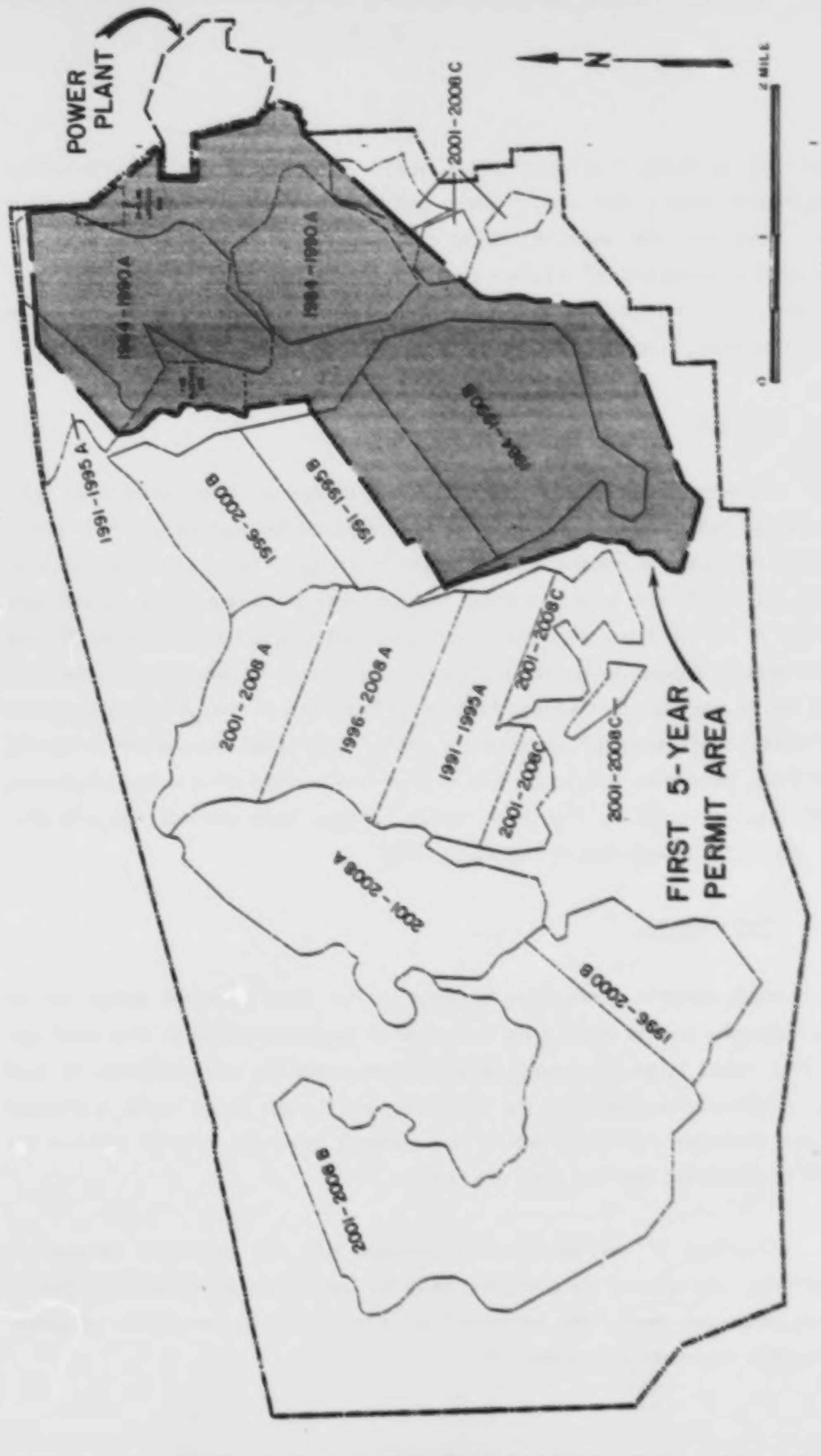

POWER PLANT
1984-1990 A
1984-1990 A
1984-1990 B
1991-1995 A
1996-2000 B
1991-1995 B
2001-2008 C
2001-2008 C
2001-2008 C
2001-2008 C
2001-2008 C
FIRST 5-YEAR PERMIT AREA
2001-2008 A
1996-2008 A
1991-1995 A
2001-2008 A
1996-2000 B
2001-2008 B
N
0
1
2 MILE

Fig 3-15 Mining Sequence and Facilities , South Hallsville Project

rerouted around the mining area prior to mining. Mine distribution will be routed via pole lines to the dragline erection area, to the mine facilities area, and to within 6,000 to 8,000 feet of each of the two active mining pits. Further transmission to the pits will be by trailing cable.

Labor Requirements

Tables 3-7 and 3-8 present schedules of the two estimated average annual hourly and salaried personnel on the mine payroll. During full production 45 salaried and an average of 126 hourly personnel are scheduled, for a total of 171 on the mine payroll.

Contractors with their own personnel will be hired to erect the draglines and construct the mine facilities. These activities are scheduled to occur from mid-1981 through the end of 1984. It is expected that contractor's mine site personnel will vary between 10 and 100, with 1984 being the peak year.

3.5.3 Access Roadway

SWEPCO will construct a public access road south from I-20 past the power plant facility, around the southern end on the mine site and west to FM 968 (see map on p. 2-22 of FEIS). SWEPCO and the State Department of Highways and Public Transportation (SDHPT) have drafted agreements that the roadway will be built to FM standards (see Appendix G). SWEPCO will be responsible for construction costs and the roadway will be turned over to SDHPT after completion.

3.6 ALTERNATIVES AVAILABLE TO EPA

Three alternatives are available to EPA regarding its permit action. These are: (1) issue the NPDES permit as proposed; (2) issue the NPDES permit with certain conditions; or (3) deny the NPDES permit. The issuance of the NPDES permit as proposed would allow SWEPCO to construct and operate the power plant mining facilities as described in Section 3.5 and to discharge wastewater to the limits set forth in the permit. However, EPA may determine that special conditions should be added to the NPDES permit where necessary to minimize or avoid adverse environmental impacts. Also, EPA may deny the NPDES permit if certain environmental considerations are significantly adversely impacted and mitigation measures are unacceptable. These considerations include violations of water quality standards, significant impacts on the human environment, endangered species, cultural resources, wetlands, floodplains and prime farmlands. Denial of the NPDES permit by EPA could cause SWEPCO to redesign the project for no effluent discharge or pursue the no action alternative.

3.7 ALTERNATIVES AVAILABLE TO OTHER PERMITTING FEDERAL AGENCIES

The pipeline and water intake structure for the proposed power plant has been authorized under Section 404 of the Clean Water Act and Section 10 of the River and Harbor Act of 1899 by the USCE. This permit authorizes the construction and operation of the facility provided that certain criteria are met.

The USCE will require Section 10/404 permits for certain other activities. The overall review of the Section 10/404 permit applications for this project, including the environmental assessment, is the responsibility of the Fort Worth District USCE. Each application is evaluated to determine the probable impact the project will have on the environment, with particular interest given to wetland and aquatic habitat. As a part of the environmental review conducted by the USCE District Office, the information is made a matter of public record through the issuance of a public notice. A comment period, normally of 30 days, is allowed during which the application is reviewed by interested agencies, organizations, and individuals. Other agencies having review responsibilities are: Texas Department of Water Resources, EPA, Texas Parks and Wildlife Department, and U.S Fish and

Impacts on local water quality may result from the operation of the proposed power plant's cooling water system. A maximum of 18,000 acre-feet per year of makeup water from Lake O' The Pines in the Cypress Basin will be released and diverted from Big Cypress Bayou, approximately 1 mile downstream from Ferrell's Bridge Dam, to the cooling reservoir on Brandy Branch, which is located in the Sabine River Basin. Although there are no existing hydroelectric power projects downstream in the Cypress or Red River basin, the potential for that type of development exists at eight locations. The loss of 18,000 acre-feet of water per year could affect future hydroelectric power generation, if developed, by the reduction of 3,300 megawatt-hours. The operation of the cooling water system will result in discharges of heated waste water and chlorine to the cooling reservoir. Discharges of heated water to the cooling reservoir will result in increased evaporation rates of water from the reservoir. Levels of conservative substances, such as total dissolved solids (TDS), chlorides, and sulfates within the reservoir, may increase due to the concentrating effect of evaporation. A portion of the water diverted from the Cypress Basin, as well as runoff water from the cooling reservoir's watershed, will eventually enter the Sabine River during flood events and through seepage. If levels of conservative substances become sufficiently high, these discharges could adversely impact local water quality.

Projected levels of TDS within the cooling reservoir have been calculated for 25 years of project operation and are presented in Table 4-8. TDS is shown to increase over the life of the project, reaching a maximum value of 314 mg/l. This projected concentration of TDS is below the 400 mg/l TDS criterion of the TDWR water-quality standards promulgated for the segment of the Sabine River proximal to the project site (Segment 0505).

The TDS concentations in the cooling reservoir were estimated by means of a mass balance analysis that used local water quality and meteorlogical data, plant heat load, and assumptions concerning plant operation and waste characteristics. Sources of TDS loadings included Brandy Branch, makeup water from Big ecology will occur. These low concentrations will preclude toxic effects on downstream aquatic organisms.

Selenium discharge limitations in the NPDES permit for the power plant ash transport water are 0.05 mg/l (daily average) and 0.10 mg/l (daily maximum). Samples will be taken weekly to insure compliance. The disposal of fly ash and scrubber sludge by landfill will result in an elevation increase of the original land surface within the disposal area from 2 feet at the upper end of the valley to 40 feet at the lower end of the valley. The initial disposal area has a total volume of approximately 1,100 acre-feet and has sufficient volume for 2 years' production of ash/sludge wastes. A landfill site in the upper reaches of the drainage system was chosen so that the base of the landfill will be above the ground-water table at all times. Sediment and/or treatment ponds will be located to capture surface water runoff from the disposal area.

Transportive Systems

Operations effects of the transportive systems on the surface water resources of the area will be related primarily to the transbasin diversion of makeup water from the Cypress Basin to the Sabine River Basin. Any consumptive use of water due to evaporation and other losses represents an unavoidable deficit in the overall water balance of the area. However, the diversion of the power plant water from the Cypress Basin to the Sabine River Basin is not expected to result in adverse impacts on the water resources of either basin. The total permitted or claimed surface water for consumptive uses in Cypress Basin is approximately 375,000 acre-feet per year, while the maximum reported consumptive use has been only about 80,000 acre-feet in any one year (TDWR, 1981b). Additionally a study by the Texas Water Development Board (TWDB) in 1977 indicates that the Cypress Basin would still have an estimated surplus of 334,200 acre- feet per year by the year 2030 (TWDB, 1977). Water diverted from the Cypress Basin into the cooling reservoir will represent a

The development of the mine and associated facilities will result in some long-term changes in the hydrologic regime of the area. The primary long-term adverse impacts expected as a result of mining activities will be alterations in peak runoff rates and volumes resulting from changes in the site topography, topsoil characteristics, vegetative cover patterns, and land use. No permanent sedimentation ponds are anticipated for this project; however, if any sedimentation ponds are allowed to remain in place permanently to be used as runoff detention basins and/or for livestock, wildlife, and recreational purposes, flood peaks will be reduced. Since no permanent sedimentation ponds are anticipated, no ongoing maintenance program has been devised to prevent permanent filling with sediment or to prevent possible structural failure, and no consideration has been given to the accessibility to such ponds for post-mining uses, except that the ponds would be designed according to State and Federal requirements. However, owners of the permanent ponds, if any, will be required by the Texas Department of Water Resources to maintain these ponds in a safe condition, and accessibility to such ponds would normally be at the discretion of the particular landowner(s) and would depend on each pond's intended purpose.

Major streams though the mine area will be altered due to temporary rerouting, resulting in straighter stream channels and shorter flow lengths. These streams will be returned to their approximate original gradient and meanders as before. Permanent rerouting is not anticipated; however, if any stream has to be permanently rerouted, energy dissipation structures will be designed for areas of high streamflow velocities to withstand undercutting and other damages caused by forces of large storm events and to prevent, to the extent reasonably possible, erosion processes caused by increased turbulence. Establishment of vegetative cover will also reduce the potential for stream channel erosion.

The levee, which will be required to protect some portions of the mine from flooding on the Sabine River, will remove a small portion of the area of the overall Sabine River floodplain. However, the levee would remove a maximum of about one-third of the cross-sectional width of the approximate 100-year flood plain. No Federal or State studies have been completed to determine the allowable actual encroachment limits along the Sabine River in Harrison, Rusk, and Gregg counties, and whether or not the levee would cause a significant increase in flood elevations is unknown. If it is determined that the levee would cause a significant increase in flood elevations (i.e., more than a one-foot increase), a rectification of the Sabine River floodplain in the affected reach would be needed to offset the reduction in the overbank conveyance caused by the levee.

In the project area, ditches will be provided along new roads to direct runoff into local drainage channels. During mining, diversion ditches, channels, and berms will be constructed to intercept runoff from disturbed areas and to divert it to sedimentation ponds that will be constructed using various combinations of dams, levees, and excavations. Runoff from undisturbed areas will either be diverted away from the areas controlled by sedimentation ponds or will be detained in upstream reservoirs to be released after runoff from disturbed areas has passed through the sedimentation ponds.

4.2.2.5 Combined Impacts of the Plant and Mine

The combined effects of the construction activities of the mine and power plant on the surface water hydrology will not be any more severe than the sum of their separate effects considered independently. Furthermore, all of the construction-related hydrologic impacts of the combined project will not occur

4.3.4.2 Mine

Air Pollutant Emissions

The operation of the proposed mine will cause particulate matter to be emitted into the atmosphere. These particulate emissions will originate from fugitive (non-point) sources.

Impact of Stack Emissions

The proposed mine will include no lignite processing facilities, and therefore will produce no stack emissions.

Impact of Fugitive Emissions

The proposed mining operation, consisting primarily of removal and replacement of large amounts of overburden material and the haulage of lignite, will generate fugitive dust. However, because the emissions from the mine will be intermittent and spread over a large area, and because significant particle settling will occur very close to each source, air quality impacts are expected to be minor. At the present time, no studies have been conducted which address fugitive emissions from Gulf Coast lignite mines. Fugitive emission assessments conducted at western surface mines are considered to be inapplicable to Gulf Coast lignite mines because of differences in climatological, geological, and soil characteristics. The surface mine does not include any coal preparation plant facilities or conveyors and will not emit greater than 250 tons per year of any applicable pollutant; therefore, PSD permit review is not applicable to the mine.

Emission Limitations

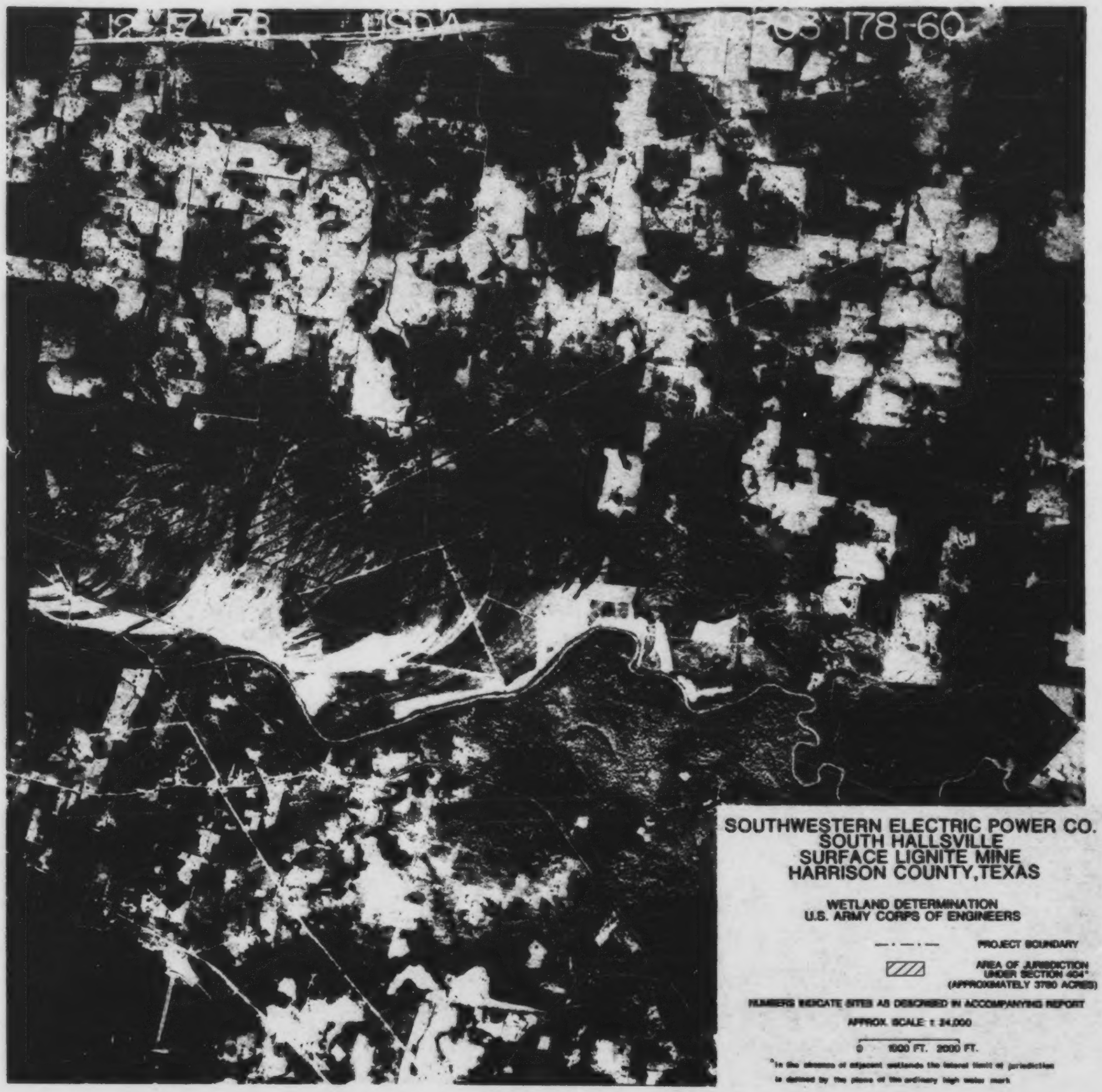
The proposed mine will have no processing facilities that would constitute point sources requiring compliance with performance standards. Emission

Wetlands

According to recent tentative interpretations of the Section 404 wetlands definition by the U.S. Army Corp of Engineers Waterways Experiment Station (USCE, 1978), wetland communities within the project area consist of wet bottomland forests, swamps, marshes, bogs, and aquatic communities. The most extensive wetland type within the project area, therefore, would tentatively be wet bottomland mixed hardwood forest.

Bottomland hardwood forests (described above as a discrete vegetation type) that border streams traversing the project area contain species preliminarily determined by the USCE (1978) to be wetland indicators. The specific type of wetland so indicated is "lowland hardwood forest occurring along the floodplains of streams lacking second bottoms". The determination of exactly how much, if any, of such floodplains is subject to permit regulation under Section 404 of Public Law 92-500 (Federal Water Pollution Control Act Amendments of 1972) is not final (USCE, 1978). However, "bottomland hardwoods technically satisfy the conditions of the Section 404 wetlands definition because these floodplain forests are characterized by cyclic inundation or soil saturation during portions of the growing season and by the presence of plant communities and associations that have been selected and maintained because of their ability to tolerate regular inundation or saturation" (USCE, 1978). The majority of the dominant overstory species in the bottomlands of the project area: loblolly pine, sweetgum, water oak, sugarberry, American hornbeam, black-gum (*Nyssa sylvatica*), red maple, overcup oak, and water hickory are tentatively listed by the USCE (1978) as wetland indicators.

The EPA has ultimate responsibility for Section 404 wetland determinations, although responsibility has been delegated to the USCE at the South Hallsville Project site. In addition to vegetational criteria, the EPA and the USCE also consider hydrologic and edaphic variables. The variables related to hydrology include drift lines, silt deposition, water marks, an active water table in the root


12-17-78
USDA
178-60
SOUTHWESTERN ELECTRIC POWER CO.
SOUTH HALLSVILLE
SURFACE LIGNITE MINE
HARRISON COUNTY, TEXAS
WETLAND DETERMINATION
U.S. ARMY CORPS OF ENGINEERS
PROJECT BOUNDARY
AREA OF JURISDICTION UNDER SECTION 404* (APPROXIMATELY 3780 ACRES)
NUMBERS INDICATE SITES AS DESCRIBED IN ACCOMPANYING REPORT
APPROX. SCALE 1:24,000
0 1000 FT. 2000 FT.
*In the absence of adjacent wetlands the lateral limit of jurisdiction is defined by the plane of the ordinary high water mark

Source: Letter from USCE, Fort Worth District to EPA dated 21 January (see Draft EIS, Appendix C) zone, stream gage data, flood predictions, historical records, visual observations, and drainage patterns. Soil variables include a mottled or gleyed soil horizon, the presence of iron or manganese concretions or nodules, the presence of free water within the root zone, and hydric classification of soil series. The general consensus among the regulatory agencies is that the definition of 404 wetlands should also include annual inundation for a period of 30 days during the growing season.

The USCE Fort Worth District has determined that the perimeter of wetlands in the project area encompasses 3,780 acres, however, some upland areas occur within the designated area that could not be distinguished from aerial photography. The topography of a large portion of the site is characterized by a series of broad sloughs and narrow ridges. The photographic scale available prohibited an accurate calculation of the acreage of the small upland areas. A preliminary 404(b)(1) assessment is presented in the Final EIS in Appendix D.

Within the project site, marshes are less common than swamps. These areas generally occur near swamps and stock ponds and where road construction impedes drainage. Frequently, the marshes border pastures and are grazed to some extent. Many marshes are dominated by a shrub layer consisting of black willow (*Salix nigra*), bastard indigo (*Amorpha fruticosa*), common buttonbush (*Cephalanthus occidentalis*), and woolly rose-mallow (*Hibiscus lasiocarpos*). The herb layer in these shrubby marshes includes such common species as water horehound (*Lycopus rubellus*), horned-rush (*Rhynchospora corniculata*), camphor-weed (*Heterotheca subaxillaris*), smart weed (*Polygonum* sp.), red-root flatsedge (*Cyperus erythrorhizos*), and late eupatorium (*Eupatorium serotinum*). The marshes that lack a well-developed shrub layer are dominated by powder-puff (*Mimosa strigillosa*), canela (*Pluchea purpurascens*), creeping lovegrass (*Eragrostis curvula*), smartweed, turnsole (*Heliotropium indicum*), and soft-rush (*Juncus effusus* var. *solutus*) in the drier, more elevated areas, and by lizard's-tail (*Gaura parviflora*), cinnamon fern (*Osmunda cinnamomea*), and hemp-weed (*Mikania scandens*) in the wetter, boggy areas.

Aquatic Habitats

Important Plant Species

Important species are defined as those that (a) are commercially or recreationally valuable; (b) are threatened or endangered; (c) affect the well being of some important species within criteria (a) or (b); or (d) are critical to the structure and function of the ecological system or are biological indicators.

Threatened and Endangered Plant Species

An emphasis was placed on threatened and endangered plant species during the vegetation baseline surveys conducted on the project site (EH&A, 1977b). A quantitative vegetation survey was conducted during May 1977.

A floral survey was accomplished by visiting representative communities in the project area during May 1977 and listing the plant species observed. Because of the potential for rare or endangered species, additional surveys of the bogs were made on three other occasions. Site visits were made during the months of September and November 1977 and April 1978. These times were selected to correspond with flowering of the potential species.

None of the 10 species currently listed as endangered or threatened in Texas by the U.S. Fish and Wildlife Service (FWS) (45 FR 82479-82569, 46 FR 3183-3186) were observed in the South Hallsville Project area. None of these species are known to occur in Harrison County (see FWS letter in Sec. 5.2, Coordination).

Three species are currently proposed as endangered or threatened in Texas by FWS (45 FR 82479-82569). These species were not observed in the South Hallsville Project area and are not known to occur in Harrison County (see FWS letter in Sec. 5.2, Coordination).

(Cont'd)

Approximately 240 species are currently considered as candidate species in Texas by the FWS (45 FR 82479-82569). Though these candidate species are not federally protected, they "should be considered in environmental planning" (45 FR 82479-82569). Table 4-18 lists those candidate species that may occur in the vicinity of the South Hallsville Project. Of these 10 species, one is known to occur in the project area. Trillium texanum was found in the vicinity of the proposed cooling reservoir. This species is listed as Status 2 in Table 4-18. However, T. texanum is neither listed nor expected in the near future to be listed as threatened or endangered by the FWS (Kologiski, 1981; Smith, 1981).

T. texanum is also listed on the Watch List of the Texas Organization for Endangered Species (TOES, 1980), as is another plant that was observed on the site, great Solomon's seal (Polygonatum biflorum). However, the species listed by TOES (1980) are not protected since the State of Texas has not promulgated an official list of endangered or threatened plant species.

Other Important Species

Commercially important species in the South Hallsville Project area include hardwoods (American elm (Ulmus americana), southern red oak, water oak, shumard oak (Quercus shumardii) and others), pines (loblolly pine, shortleaf pine), and both forage and row crops. Coastal bermudagrass is the most important species in the area's extensive improved pastures.

Dominant species are, by definition, critical to the structure and function of the ecological system and, therefore, qualify as important species under ties. A maintenance cycle using one of the two above methods will continue for the life of the project (30 years) or beyond in order to keep the height of woody species low.

The actual ROWS will provide a greater diversity of vegetation and subsequently will benefit wildlife species by providing "edge" habitats along the borders.

Mine

Impacts upon vegetation within the mine site during operations will include those noted previously for construction activities. A major adverse impact during operation is the destruction of vegetation within the mine area. Other impacts are associated with changes in environmental variables to which adjacent biotic communities, including wetlands, have adapted.

A major impact of mine operation will be the preemption of existing vegetation in the proposed mine area. During the 24-year life of the mining operations, a total of 10,545 acres of vegetation within the mine site will be disturbed by mining. Table 4-17 identifies the vegetation types to be affected, by mining blocks, over the life of the mine. Mining will occur progressively, with disturbed areas to be revegetated within 2 years following mining. Consequently, an average of 439 acres will be disturbed per year and an average of 439 acres will be revegetated per year. A maximum of 741 acres of disturbed acreage will occur in the year 2008; however, this area will be reclaimed in the following year. Sensitive areas to be disturbed during the 24-year life of the total mining operations include approximately a total of 116 acres of swamps and marshes, 49 acres of streams and ponds, and an undetermined portion of 568 acres of bottomland hardwood forest (see Sec. 4.5.1, Wetlands). Woodland communities that will be preempted by the proposed project slow surface winds, provide a cooling effect on the area, and protect soil from erosion. The USCE determined that 3,780 acres of wetlands occur

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on the project site. The first 5-year mining block does not contain wetlands within the actual area to be mined, but approximately 62 acres of wetlands occur within the ancillary activities area. In future mining activities, 284 acres occur on mining block 2000-2008 B; 292 acres occur on mining block 1996-2000 B; 181 acres occur on mining block 2001-2008 A; and 4 acres occur on mining block 2001-2006 C (see Fig. 3-15 on page III-8 of this document). Over the life of the project, primary or direct impacts such as construction of levees, haul roads, etc., and secondary or indirect impacts such as sedimentation, erosion, etc. could affect the remaining 2,957 acres of wetlands. Mitigation measures to be employed by SWEPCO and SMC to minimize adverse impacts on wetlands include, as appropriate, avoidance of wetlands, prevention of sediment loading in wetland areas, non-interruption of normal surface-water flow conditions, and erosion control measures. Additional mitigation measures could be required as a result of the environmental review for USCE Section 404 permit actions in wetland areas. Appendix D contains a preliminary Section 404(b)(1) analysis which will be finalized when the applications for Section 404 permits are submitted to the USCE.

area occupied by mine facilities will be removed from existing vegetation for the life of the project. About 10,545 acres in the mine site will be disturbed incrementally and a small portion of the 10,226-acre total ancillary area may potentially be disturbed over the life of the project.

Since mining and reclamation will proceed sequentially, the adverse impacts of habitat preemption by mining are generally considered to be short term. Long-term impacts will result from the mining of lands presently supporting relatively mature, diverse communities such as riparian vegetation along intermittent tributaries of project area streams. Reestablishment of such communities, even after contouring and revegetation, will be largely dependent on natural succession and will require many years. The reconfiguration of surface contours, along with the natural influences of wind and water erosion and biotic factors, should produce the heterogeneity necessary for the development of forest community diversity. However, some micro-communities, such as bogs, which are dependent on local hillside seeps, will have a low probability of reestablishment. In addition, due to landowner reclamation preferences, it is very likely there will be a long-term major change in plant communities within the project area. For example, forested areas will be destroyed and many of these areas are likely to be restored to improved pastureland. The forests slow surface wind, provide a cooling effect on the area, and protect the soil from erosion, thus protecting water quality.

4.5.2 Wildlife

4.5.2.1 Existing and Future Environments

Wildlife Habitats and Species

The proposed South Hallsville Project site lies within the Austroriparian Biotic Province (Blair, 1950). This province, which stretches from eastern Texas through the southeastern United States to the Atlantic Ocean, is characterized by *woodhousei*), Red-eared Slider (*Chrysemys scripta*), False Map Turtle (*Graptemys pseudogeographica*), Southern Water Snake (*Nerodia fasciata*), Diamondback Water Snake (*Nerodia rhombifera*), and Cottonmouth (*Agkistrodon piscivorus*).

Important Species

"important species" are defined as those that are (1) commercially or recreationally valuable; (2) threatened or endangered; (3) critical to the survival of a species satisfying criterion (1) or (2); or (4) critical to the structure or function of the ecosystem, or biological indicators. No species present on site are judged to satisfy criterion (3) or (4). Those which satisfy criterion (1) or (2) are discussed below.

Threatened and Endangered Species

Several threatened or endangered wildlife species, as designated by FWS, potentially exist on the project site. Wildlife baseline studies were conducted to determine, among other things, the actual presence of or potential for threatened and endangered species on the project site (EH&A, 1977b). Wildlife baseline studies included: quantitative and/or qualitative surveys of amphibians, reptiles, birds, and mammals conducted primarily during a nine day period: 11-15 April and 19-22 April 1977; a preliminary reconnaissance trip during the period of 21-24 March 1977; and a winter waterfowl survey conducted 25-27 January 1978.

The Red-cockaded Woodpecker (*Picoides borealis*) and American Alligator (*Alligator mississippiensis*) are the only species considered threatened or endangered by the FWS (45 FR 33678-33781) that may permanently reside in the project area. Neither species was observed on the project site. No habitats meeting the specific requirements of the Red-cockaded Woodpecker were located during site surveys, nor are any large areas of suitable habitat expected to occur in the project area since logging practices preclude large stands of mature pine. The possibility does exist, however, that some small areas of suitable habitat exist in isolated portions of the project area.

American Alligators are known to occur in Caddo Lake (northeastern Harrison County) and probably exist in the Sabine River south of the project area. The lower portions of the small drainages on the project site may provide limited habitat for the alligator, although none were observed during baseline surveys of the area. The total alligator population in Harrison County has been estimated at 100, with an average of 1.1 alligators per square mile of good habitat (Potter, 1981).

In addition to potential resident species, two federally listed endangered raptorial birds may occasionally pass through the area as migrants or winter visitors. These are the Bald Eagle (Haliaeetus leucocephalus) and Peregrine Falcon (Falco peregrinus). Neither of these species were observed during field surveys, nor were any habitats found that would be expected to harbor either species for a significant amount of time.

Coordination with the FWS, pursuant to Section 7 of the Endangered Species Act, was initiated. The FWS requested a biological assessment of potential impacts of the project on the American Alligator, Red-cockaded Woodpecker, and Bald Eagle. An assessment of the first 5-year mining block was prepared by EPA and was reviewed by FWS. The FWS concluded that the proposed projects would not affect the Red-cockaded Woodpecker or American Alligator and is not likely to jeopardize the continued existence of the Bald Eagle. However, it was pointed out in the FWS biological opinion that the Red-cockaded Woodpecker may become an inhabitant in the area in the next 10 to 20 years as the young pine trees mature into possible suitable habitat. Likewise, the Bald Eagle may use the cooling reservoir or other project ponds for feeding habitat. The American Alligator may be adversely affected when future mining occurs closer to the Sabine River floodplain and associated wetland areas.

Striped Skunk, furbearers do not appear especially numerous in the project area. According to Boone (1977), a very low percentage of the furbearing animals harvested in Texas is taken from the Pineywoods Region. Furbearers are most abundant in wooded stands, especially riverine forests.

Waterfowl provide a fairly important recreational resource in the project area. Ponds and marshes within the floodplain of the Sabine River seem to provide the best habitat for migrating or wintering ducks. A site field survey in January 1978 revealed that the "Duck Pond" (located in the Sabine River floodplain) was the most important waterfowl habitat in the project area. However, very few ducks were observed in the area, even though decoys and blinds were present on the pond. The wetlands within the project area, primarily within the Sabine River floodplain, undoubtedly provide important habitat and food supply for wintering and migrating waterfowl. However, these wetlands do not appear to be dissimilar from other wetlands in this region of Texas. In addition, the majority of the wetlands in the project area within the Sabine River floodplain will not be impacted by mining, and those areas to be impacted will take place incrementally through the life of the project. The project area does contain some suitable nesting habitat for the Wood Duck (*Aix sponsa*), and this species was observed in the project area during baseline ecological studies (EH&A, 1977b).

Ecologically Sensitive Habitats

No wildlife habitats identified on the project site are unusual or unique to the site. All are locally well- represented outside the site boundaries. The most sensitive habitats on site, bottomland forest and wetlands, have, for the most part, been previously impacted by human activity, including selective cutting and other management techniques. These areas comprise about 10 percent of the total project site.

adjacent habitats are at or near their normal carrying capacities. Population stresses due to increased densitites will activate density-dependent population regulating mechanisms that will push local populations back toward their normal pre-project levels. This impact will be long-term, extending over the life (24 years) of the facilities. With proper grading and revegetating, these areas can be restored to their approximate pre-mining biological productivity following decommissioning and dismantling of the facilities.

Some small, relatively immobile forms (e.g., many amphibians, reptiles, and small mammals) will be destroyed by heavy equipment. If construction occurs during reproductive seasons (e.g., spring and early summer for most passerine birds and many other animals), breeding activities will be disrupted and many young-of-the-year lost.

Site preparation and construction will produce some unavoidable adverse impacts to wildlife and vegetation associated with the production of gaseous exhaust emissions, dust, and noise. Primary production in vegetation immediately adjacent to construction sites may be reduced as a result of dust accumulation on foliage or foliar injury due to exhaust emissions. Wildlife should be minimally affected by dust and gaseous emissions. Large, mobile forms may retreat from the immediate area of construction and may modify normal activity patterns in response to noise and human activity.

As determined by EPA in its biological assessment for threatened and endangered species for the first 5-year permit area, no activities should affect the Red-cockaded Woodpecker; however, the American Alligator and the Bald Eagle may be affected. In other studies conducted for the rest of the project area, no species or habitat was discovered that might be utilized by the woodpecker or eagle. Potential but limited alligator habitat was present, but no species were observed.

In other studies conducted for the rest of the project area, no species or habitat was discoverd that might be utilized by the woodpecker or eagle. Potential but limited alligator habitat was present, but no species were observed. However, it was pointed out in the FWS biological opinion that the Red-cockaded Woodpecker may become an inhabitant in the area in the next 10 to 20 years as the young pine trees mature into possible suitable habitat. Likewise, the Bald Eagle may use the cooling reservoir or other project ponds for feeding habitat. The American Alligator may be adversely affected when future mining occurs closer to the Sabine River floodplain and associated wetland areas.

can be restored relatively easily. Postmining areas revegetated with suitable mixtures of pasture grasses should quickly be recolonized by appropriate birds, small mammals, and other wildlife such that communities similar to those of premining pastureland should develop within a few years after reclamation. However, restoration of more complex natural communities in the mined area (e.g., upland forest, bottomland forest, swamps, and marshes) will be more difficult and require a much longer period of time (i.e., several decades for upland forest and, perhaps, centuries for bottomland forests and swamps). Thus, the alteration of these habitats is a long-term adverse impact. Natural species diversity characteristic of natural forest ecosystems will develop as natural succession progresses. The early stages will be characterized by high net community productivity and low species diversity. Among the wildlife species favored in early successional communities are such recreationally valuable species as the White-tailed Deer, Eastern Cottontail, Bobwhite, and Mourning Dove. As woody vegetation becomes dominant and the forest community develops, faunal diversity should increase while net community productivity decreases.

Because of landowner preference, it is anticipated that most of the forest habitat disturbed in the area of the mine will be reclaimed to pasture as a post-mining land use. Thus, only those species adapted to pasture will colonize such reclaimed land. Species diversity will change accordingly, and populations will depend on grazing pressure and pasture conditions. The reduction in numbers of forest-adapted species will be a long-term adverse impact, and the recreational opportunities offered by the affected species will be lost as populations are reduced.

Section 4.5.2.2 discusses adverse mine operational impacts to floodplain and wetland habitats as a result of surface water diversion, changes in topography, increased sedimentation, and dewatering. Any such activities producing adverse impacts of floodplain or wetland habitats on the mine or in adjacent areas will impact terrestrial wildlife (Sec. 4.5.2.1) associated with habitats.

The activity of men and machinery along with associated noise, dust, and exhaust emissions will have minor adverse impacts on local wildlife over the life of the project. Traffic on haul roads and access roads will increase road mortality of terrestrial vertebrates. Some mobile mammals and birds may modify their behavior patterns to avoid contact with men and machinery or leave the immediate vicinity of the mine entirely.

Threatened or Endangered Species

Baseline aquatic ecology surveys were conducted during April 1977 for water quality, phytoplankton, zooplankton, benthic macroinvertebrates, and fish (EH&A, 1977b). A one-year aquatic study was conducted to supplement observations made during the April 1977 survey (EH&A, 1978a). Biological sampling of phytoplankton, zooplankton, macroinvertebrates, and water quality were conducted on a bimonthly schedule beginning in November 1977 and ending in September 1978.

No rare or endangered aquatic species (e.g., fish, macroinvertebrates, etc.) are known to occur or could potentially occur within the South Hallsville Project site or in any area surrounding the project.

Recreationally or Commercially Important Species

A number of species belonging to the families Ictaluridae (catfish) and Centrarchidae (bass and sunfish) are common in the waters of the project area. While these are important sportfish species, the project site creeks are too small to support significant recreational fishing. Due to limited public access of the Sabine River in Harrison County and the close proximity of a number of reservoir fishing sites, sportfishing in the immediate vicinity of the project site is considered light.

In addition to catfish, smallmouth buffalo (Ictiobus bubalus) and river carpsucker (Carpiodes carpio) are considered commercially valuable species. However, no commercial fishing is currently permitted in Harrison County (EH&A, 1977b).

4.5.3.2 Effects of No Action

The effects on the aquatic systems of the project area resulting from selection of the no action alternative are unpredictable. One result could be no

In effect, cooling reservoir construction has enlarged the surface area of Rogers Lake from 5 to 1,388 acres. It is expected to have caused no adverse biological impacts relative to its former condition.

Although the approximately 1,388-acre cooling reservoir was completely cleared of vegetation, artificial tire reefs are being placed to provide cover for fish. These conditions, together with the other substrates available in the much larger area of the cooling reservoir, the warmer year-round water temperatures, and with proper fishery management, should provide for more favorable growth and reproduction of sportfish populations and greatly increase the fishery habitat.

Transportive Systems

Adverse impacts to aquatic ecosystems associated with construction of the transportive systems may include temporary erosion and sedimentation in the immediate vicinity of stream crossings. Potential adverse impacts to stream systems resulting from sedimentation may include temporarily reduced phytoplankton, zooplankton, benthic invertebrates, and fish populations; temporary reductions in benthic habitat diversity; temporary increases in stream nutrient levels; and temporarily reduced primary productivity. Temporary and localized sedimentation is not expected to result in adverse impacts to area streams since these streams are characterized by low zooplankton populations; benthic invertebrate populations adapted to soft, muddy substrates; and fish communities dominated by species tolerant of turbid environments. The duration of any potential impacts would be short-term and restricted to the duration of construction activities at each

Transportive Systems

Impacts associated with operation of the transportive systems may result from ROW maintenance and intake of water from Big Cypress Bayou for the makeup water pipeline. Maintenance of the transportive systems will require that woody vegetation be restricted from colonizing within the ROW. Therefore, long-term, but localized, impacts to aquatic ecosystems at ROW crossings will include localized elevated temperatures, increased solar insolation, and increased phytoplankton production at stream crossings. Rooted aquatic plants may also become established in areas where canopy cover is permanently removed.

The makeup water intake and pump station will be located near the south bank of Big Cypress Bayou, with the pump station located 400 feet from the water's edge. Stainless steel fixed screens with 0.5 x 0.5 inch mesh will be used at the intake opening. Diversion rate will be 33.4 cfs and intake velocity through the screens will not exceed 0.5 feet per second. No antifouling chemicals will be used at the site. Adverse impacts to fish spawning or nursery waters may occur near the intact structure because of impingement and entrainment of aquatic organisms.

Mine

Because the upland portions of the drainages of the streams of the project area will be mined, disruption of normal volumes and patterns of flow may be expected until backfilling has been completed, with minor adverse impacts on aquatic species.

Much of the disturbance from mine operation will result from the increased suspended solids loads entering the creeks, which will be a function of rainfall and surface water runoff. Most of the runoff and other discharges from the

Although the mining plan avoids the more productive bottomlands of the lower reaches of the project area streams and the Sabine River, both the channels and drainage areas of the upland reaches will be adversely impacted during operation. Since the biota of the upland reaches consists primarily of organisms adapted to ephemeral environments, these areas can be expected to be recolonized rapidly by similar assemblages following backfilling and contouring.

The addition of small amounts of hydrocarbons in the runoff from roads and vehicle service areas is not expected to produce any changes in species composition, abundance, primary production, or benthic respiration on the streams of the project area that could be demonstrated by a field program.

4.6 CULTURAL RESOURCES (PREHISTORIC AND HISTORIC)

4.6.1 Existing and Future Environments

The South Hallsville Project area is in the south central portion of a four-state region that has been termed the Caddoan "culture area". This culture area encompasses all of northeastern Texas, southeastern Oklahoma, southwestern Arkansas, and northwestern Louisiana. The Texas Caddoan core area stretches from about 100 miles inland from the Texas coast to the Trinity and Brazos rivers and northward to the Red River, although a sphere of influence is evident outside of that boundary. Historically, the Texas Caddos were represented by two confederacies, Kadohodocho and Hasinai, and perhaps a third, the Wichita, whose distinctive traits may represent a synthesis of southern plains and woodland cultures. All of these groups lived in the western Gulf Coastal Plain physiographic province (Fenneman, 1938). Within the immediate project area, archaeological work has revealed a representative selection of sites spanning a long cultural development. Jones (1957) reported a collection of Scottsbluff, Plainview, Meserve, and San Patrice projectile points from the Sabine River floodplain just south of Longview, Texas. Large numbers of Archaic "dart points" have been collected by amateurs in and around the project area. Material that is transitional from Archaic to "Pre Caddo Formative"

(Cont'd)

is rare in Texas. Further, historical sites within and around the project area span the period from historic Caddo occupation to the early nineteenth century, with significant Anglo-American and Black occupation dating from the late 1830's to the last quarter of the nineteenth century.

Two reconnaissance-type studies of the general project area recorded 13 prehistoric sites (Whitsett, 1977; Dibble, 1977). Twelve of these sites have been recommended for further testing to determine their eligibility for inclusion in the National Register of Historic Places (NRHP).

During a 100 percent survey of the proposed power plant site, 20 cultural resources sites were located, including four prehistoric and 16 historic sites (EH&A, 1978b, 1979). One prehistoric and one historic site were recommended for further testing to determine their eligibility for inclusion on the NRHP.

A 20 percent survey of the proposed mine area was conducted, resulting in a predictive model for the remaining 80 percent of the area (EH&A, 1978b, 1979c, 1981b). One hundred and seventy-six cultural resources sites were located; 88 prehistoric and 72 historic, including 14 cemeteries. Further testing has been recommended for 40 prehistoric and 11 historic sites to assess their eligibility

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APPENDIX A -REGULATORY REQUIREMENTS

National Energy Act

The National Energy Act of 1978 consists of five separate pieces of legislation:

1. National Energy Conservation Policy Act of 1978
2. Power Plant and Industrial Fuel Use Act of 1978
3. Public Utility Regulatory Policy Act of 1978
4. Energy Tax of 1978
5. Natural Gas Act of 1978

The National Energy Conservation Policy Act of 1978 contains provisions applicable to electric utility companies meeting specific requirements which are contained in Part I of Title II and Part 4 of Title VI of the Act. Part I of Title II contains provisions to effect residential energy conservation by requiring through State residential energy conservation plans, that each "public utility" implement a program to assist its customers in conservation efforts through education, energy audits, and other means. A "public utility" is defined as ". . . any persons, State agency or Federal agency which is engaged in the business of selling natural gas or electric energy . . . to residential customers for use in a residential building."

Because SWEPCO sells electric energy directly to residential customers, it is considered a public utility by the Department of Energy's (DOE) definition and is therefore subject to Part I of the Act including the implementation of a conservation program.

Part 4 of Title VI, Section 661, amends the Energy Policy and Conservation Act to incorporate, with one modification, the provisions of Section 125 of the

Clean Air Act that require the use of locally or regionally available coal or coal derivatives if such use is determined by the proper authorities to be necessary in order to minimize significant local or regional economic disruption or unemployment that would result from the use of other than locally or regionally available coal, petroleum products, or natural gas.

The primary purpose of the Power Plant and Industrial Fuel Use Act of 1978 (FUA) is to minimize the use of petroleum and natural gas in industrial and electric utility boilers. To accomplish this purpose, the FUA prohibits, except for exemptions that may be granted by DOE, the use of petroleum and natural gas by new electric utility power plants.

The Economic Regulatory Administration (ERA) of DOE has issued final rules (45 FR 38302-38308 (June 6, 1980)) to implement certain provisions of the FUA. Section 503.2 of the ERA/DOE rules impose prohibitions on: (1) the use of petroleum or natural gas as primary energy sources in any new electric power plant and, (2) the construction of any new electric power plant without the capability to use an alternate fuel as a primary energy source. According to Section 500.2(a)(66), "primary energy source" is defined as "... the fuel or fuels used for normal operation by any existing or new electric power plant ... except ... minimum amounts of fuel required for unit ignition, startup, testing, flame stabilization and control use ..." "Alternate fuel" is defined in Section 500.2(a)(7) as "Electricity or any fuel other than natural gas or petroleum. The term (alternate fuel) includes ... lignite ...".

SWEPCO currently has mineral rights to an over 30,000-acre lignite reserve just south of the proposed power plant and will burn lignite as its primary energy source. Consequently, the prohibitions of Section 503.2 of the FUA do not apply to the proposed power plant.

The NSPS are emission standards for air pollutants emitted by specific classes of new air pollution sources, including lignite-fired steam boilers. The NAAQS are ambient concentration standards for seven criteria pollutants, including the five principal air pollutants to be emitted from the proposed plant.

The NAAQS consist of two sets of standards: (1) the primary standards, which the EPA has promulgated to protect the public health with an adequate margin of safety, and (2) the secondary standards, which define levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects caused by the criteria pollutants.

PSD regulations have been promulgated by the EPA to ensure that the air quality in clean air areas, i.e., areas attaining the NAAQS, does not significantly deteriorate. Under PSD regulations, new sources and modifications proposing to emit significant quantities of air pollutants are required to submit a PSD permit application to the EPA or other delegated reviewing authority for approval. The application must demonstrate: (1) that the proposed project has utilized the best available pollution control equipment in designing the project, (2) that the proposed pollution emissions will not cause an exceedance of the NAAQS or allowable PSD pollutant concentration increments, and (3) that the proposed emissions will not cause significant adverse effects on local soils, vegetation, and atmosperic visibility. Allowable PSD increments are ambient pollutant concentration increases to be allowed above specified baseline air quality levels defined under the EPA's PSD regulations promulgated on June 19, 1978, and amended August 7, 1980.

The standards and regulations limit the design and operation of proposed new pollution-emitting sources such that source emissions will cause only small and infrequent impacts on air quality. In order to satisfy the limitations set by the NSPS, NAAQS, and PSD regulations on a proposed major source such as the proposed Henry W. Pirkey Power Plant Project, the source must implement high-efficiency pollution control equipment, i.e., BACT. A complete BACT analysis considering energy, economic, and environmental impacts for various control alternatives is required for proposed sources under PSD review.

The applicant submitted a PSD permit application (PSD-TX-064) to EPA and a permit was issued on 30 March 1978 that complies with NSPS, NAAQS and PSD regulations. In addition, BACT will be applied to emissions sources at the power plant (see Sec. 4.3, Climatology/Air Quality).

10/404 U.S. Corps of Engineers Permit

The Department of the Army (USCE) permit program is authorized by Section 10 of the River and Harbor Act of 1899, Section 404 of Public Law 92-500 and Section 103 of Public Law 92-532. These laws require permits to authorize structures and work in navigable waters of the U.S., the discharge of dredge or fill material, and the transportation of dredge material for the purpose of ocean dumping. Through this permit program the USCE seeks to protect the quality of the nation's water resources and to maintain water quality by protecting swamps, marshes, and similar wetland resources.

PART IV

PREFERRED ALTERNATIVES

PART IV PREFERRED ALTERNATIVES

SWEPCO's preferred alternative is to construct and operate the power plant as proposed and evaluated in the Draft and Final EIS's. SMC's is to construct and operate the lignite mine as proposed and evaluated in the Draft and Final EIS's. EPA's preferred alternative is to issue the NPDES permits to SWEPCO and SMC as drafted and included in Appendices A and B, respectively, of the Final EIS. Both of these EPA permits are conditioned to avoid or minimize additional adverse impacts on cultural resources.

APPENDIX A

NPDES Permit for the
Henry W. Pirkey Power Plant

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION VI
1201 ELM STREET
DALLAS, TEXAS 75270

CERTIFIED MAIL: RETURN RECEIPT REQUESTED (P26 4777328)

Mr. John W. Turk, Jr.
Vice Pres., Supt. of Power
Southwestern Electric Power Co.
P.O. Box 21106
Shreveport, Louisiana 71156

RE: Application to Discharge to Waters of the United States
Permit No. TX0087726

Dear Mr. Turk:

Enclosed is the public notice, fact sheet and a copy of the permit which this agency has drafted under the authority of the National Pollutant Discharge Elimination System. A copy of the final permit will be mailed to you when the agency has made a final permit decision.

Should you have any questions concerning any part of the permit, please feel free to contact the Permits Branch at the above address or telephone (214) 767-4375.

Sincerely,

Myron O. Knudson

Myron O. Knudson, P.E.
Director
Water Management Division (6W)

Enclosures

cc w/permit copy: Texas Department of Water Resources

Permit No. TX0087726 for NPDES Authorization to Discharge to waters of the United States.

The applicant's mailing address is:

Southwestern Electric Power Company
P.O. Box 21106
Shreveport, Louisiana 71156

Brandy Branch Reservoir discharges to Brandy Branch; thence to the Sabine River in Segment 0505 of the Sabine River Basin, a water of the United States which is classified for noncontact recreation, the propagation of fish and wildlife and domestic raw water supply, and is located on that water adjacent to Red Oak Road, at a point approximately 6 miles southeast of the City of Hallsville, Harrison County, Texas. A fact sheet is available. The applicant's activity, under the standard industrial classification (SIC) code 4911 which results in an anticipated discharge, is electric power generation by the H.W. Pirkey Steam Electric Station.

The changes to the heretofore issued authorization to discharge are as follows:

1. Outfalls 001 through 007 have been added to the permit.
2. Existing Outfall 010, treated sanitary effluent, has been renumbered as Outfall 008.

The Regional Administrator made an initial determination that Southwestern Electric Power Co.'s proposed steam electric generating plant would be a new source as defined in Section 306 of the Clean Water Act. This determination was not appealed and subsequently became the final determination that the proposed facility would be a new source. The National Environmental Policy Act is applicable to the issuance of new source NPDES permits. After a careful review, EPA has concluded that the issuance of this permit will be a major federal action significantly affecting the quality of the human environment. Consequently, an Environmental Impact Statement (EIS) will be prepared. A Draft EIS has been filed with the EPA, Office of Federal Activities. A limited number of copies are available upon request from Mr. Clinton Spotts, Environmental Protection Agency, 1201 Elm Street, Dallas, Texas 75270. Comments received on the statement will be considered in making a determination regarding issuance of the proposed permit.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION VI
1201 ELM STREET
DALLAS, TEXAS 75270

FACT SHEET

For proposed National Pollutant Discharge Elimination System (NPDES) permit to discharge No. TX0087726 to waters of the United States.

Issuing Office: Environmental Protection Agency
1201 Elm Street
First International Building
Dallas, Texas 75270

Applicant: Southwestern Electric Power Company
P.O. Box 21106
Shreveport, Louisiana 71156

1. a. Reason For Permit Action: The applicant has applied for an amendment/modification of their permit to authorize seven additional outfalls and an increase in the volume of wastewater discharged. The existing permit currently authorizes a discharge of 15,000 gallons per day of treated sanitary wastes from a plant intended to serve construction workers. The proposed permit will authorize an intermittent, flow variable discharge from Brandy Branch Reservoir plus a 600 MGD discharge of condenser cooling water into the reservoir. Other low volume waste streams will also discharge to the reservoir.

   b. Plant Type and Location: The applicant proposes to operate the H.W. Pirkey S.E.S., containing A-750 m/w lignite fueled generating units which is scheduled to begin operating in 1985. As described in the application, the plant site is located adjacent to Red Oak Road, at a point approximately six miles southeast of the City of Hallsville in Harrison County, Texas.

   c. Description of Wastewater System: The company is presently constructing the Brandy Branch reservoir with a surface area of 1242 acres and a capacity of 29,513 acre-feet @340 msl. Due to the small drainage area (4.1 square miles), additional water may be pumped from the Lake O' the Pines to maintain the operational level of the reservoir. The reservoir will serve as a cooling pond to dissipate the heat and chlorine in the condenser cooling water, which is recycled to the reservoir. Other low volume wastes, ash transport water, boiler blowdown, metal cleaning wastes, lignite pile runoff and sanitary sewage shall be treated and discharged either to the reservoir or into the condenser cooling water.

2. Proposed Permit: The existing permit regulates only treated sanitary sewage under Outfall 010. The proposed permit will regulate the cooling reservoir discharge and the wastestreams discharged into the reservoir. The following table lists the outfalls, the type waste discharge and the volumes.

Table 1

Outfall	Volume	Type Wastewater
001	Intermittent flow variable	Cooling reservoir discharge
002	600 MGD	Condenser cooling water
003	Intermittent flow variable	Ash transport water (bottom ash pond)
004	Intermittent flow variable	Boiler blowdown
005	Intermittent flow variable	Low volume wastes
006	Intermittent flow variable	Lignite pile runoff (stormwater)
007	Intermittent flow variable	Metal cleaning wastes
008*	15,000 gpd	Treated sewage effluent

* Previously designated as Outfall 010.

3. Receiving Waters: Brandy Branch Reservoir discharges are to Brandy Branch; thence to the Sabine River in Segment No. 0505 of the Sabine River Basin. The known uses of the receiving water are noncontact recreation, the propagation of fish and wildlife and domestic raw water supply. Stream standards are contained in the "Texas Surface Water Quality Standards" dated April, 1981. General Criteria, Section VI is shown on Pages 4 through 7. Specific Criteria is shown on Page 23.

4. The following is a quantitative description of the discharge described in the application:

a. Outfall No. 001

(1)

Flow Frequency	Avg Daily, MGD	Max, MGD	Min, MGD

Intermittent, flow variable with rainfall event.

(2)

Temperature, Degrees F			
Avg Summer	Avg Winter	Max	Min
N/A	N/A	95	N/A

(3)

Effluent Characteristics	Daily Avg mg/l	Daily Max mg/l
Biochemical Oxygen Demand (5-day)	< 10	< 10

b. Outfall No. 002

(1)

Flow Frequency	Avg Daily, MGD	Max, MGD	Min, MGD
Continuous	600	600	N/A

(2)

Temperature, Degrees F			
Avg Summer	Avg Winter	Max	Min
N/A	N/A	122	N/A

(3)

Effluent Characteristics	Daily Avg mg/1	Daily Max mg/1
Total Suspended Solids	30	100
Chlorine (free available)	0.2	0.5

c. Outfall No. 003

(1)

Flow Frequency	Avg Daily, MGD	Max, MGD	Min, MGD
Intermittent, flow variable with plant operation			

(2)

Effluent Characteristics	Daily Avg mg/1	Daily Max mg/1
Biochemical Oxygen Demand (5-day)	10	15
Chemical Oxygen Demand	20	25
Total Suspended Solids	< 2	5
Oil and Grease	< 5	<5

d. Outfall No. 004

(1)

Flow Frequency	Avg Daily, MGD	Max, MGD	Min, MGD
Intermittent flow variable with plant operation			

(2)

Temperature, Degrees F			
Avg Summer	Avg Winter	Max	Min
N/A	N/A	212	N/A

(3)

Effluent Characteristics	Daily Avg mg/1	Daily Max mg/1
Total Suspended Solids	30	100
Copper	1	1
Chromium	< 5	< 5
Nickel	< 1	< 3

e. Outfall No. 005

(1)

Flow Frequency	Avg Daily, MGD	Max, MGD	Min, MGD
Continuous	flow variable with plant operation		

(2)

Effluent Characteristics	Daily Avg mg/1	Daily Max mg/1
Total Suspended Solids	30	100
Oil and Grease	15	20

f. Outfall No. 006

(1)

Flow Frequency	Avg Daily, MGD	Max, MGD	Min, MGD
Intermittent - flow variable with rainfall			

(2)

Effluent Characteristics	Daily Avg mg/l	Daily Max mg/l
Total Suspended Solids	N/A	50
Oil and Grease	15	20

g. Outfall No. 007

(1)

Flow Frequency	Avg Daily, MGD	Max, MGD	Min, MGD
Intermittent - flow variable with plant operation			

(2)

Effluent Characteristics	Daily Avg mg/l	Daily Max mg/l
Total Suspended Solids	30	100
Oil and Grease	15	20

h. Outfall No. 008

(1)

Flow Frequency	Avg Daily, MGD	Max, MGD	Min, MGD
Continuous	0.035	0.035	N/A

(2)

Temperature, Degrees F			
Avg Summer	Avg Winter	Max	Min
N/A	N/A	90	35

(3)

Effluent Characteristics	Daily Avg mg/l	Daily Max mg/l
Biochemical Oxygen Demand (5-day)	20	65
Total Suspended Solids	20	65
Chlorine Residual	2	10

5. On the basis of preliminary staff review, the Environmental Protection Agency, after consultation with the State of Texas, has made a tentative determination to issue a permit for the discharge described in the application.

   The proposed effluent limitations for those pollutants proposed to be limited are attached.

6. A brief explanation of the express statutory or regulatory provision on which permit requirements are based, including appropriate supporting references to the Administrative Record.

   The following items were considered in developing the proposed permit limitations:

NPDES Application Standard Form C submitted with letter of January 19, 1982,

TDWR Rules, September 1, 1977, 156.18.05.001-.004, 156.19.05.001-.010, and 156.19.15.001-.009,

Waste Load Allocation/Evaluation for Segment 0505 of the Sabine River,

"Texas Surface Water Quality Standards" April, 1981,

Existing Permits TDWR Permit No. 02496, effective 9/21/81, expiration 9/21/86, NPDES Permit TX0087726, effective 12/11/81, expiration 12/10/86.

EPA Steam Electric Power Generating Point Source Category guidelines (October 8, 1974), 40 CFR 423, Subpart A, 423.15, Standards of Performance for New Sources.

7. The following is an explanation of calculations or other necessary explanation of the derivation of specific effluent limitations and conditions.

Outfall 001 - Temperature limits are based on Temperature criteria for Segment 0505. (Texas Surface Water Quality Standards)
Outfall 002- Flow and temperature limits are based on the application data. Chlorine limits are based on NSPS under 423.15 (h)(j).

Outfall 003 - TSS, O&G and pH limits are based on NSPS under 423.15(a) and (d). Selenium limits are based on TDWR Rule 156.19.15.001-.009.

Outfall 004 - TSS, O&G, Copper and Iron limits are based on NSPS under 423.15(g). pH is controlled at Outfall 003, since this boiler blowdown discharges into the ash pond thence to the reservoir.

Outfall 005 - TSS, O&G and pH limits are based on NSPS under 423.15(a) and (c).

Outfall 006 - TSS and pH limits are based on NSPS under Subpart D under 423.45.

Outfall 007- TSS, O&G, Copper, Iron and pH limits are based on NSPS under 423.15(a) and (f).

Outfall 008 - BOD_5, TSS, pH, and chlorine limits are based on secondary treatment standards under TDWR Rule No. 156.18.05.001-.004.

8. The requested variance does appear justified for the following reason:

N/A

9. The permit is in the process of certification by the State Agency. A draft permit and draft public notice will be sent to the District Engineer, Corps of Engineers and to the Regional Director of the U.S. Fish and Wildlife Service and the National Fisheries Service prior to the publications of that notice.

10. The public notice describes the procedures for the formulation of final determinations.

Permit No. TX0087726
Application No. TX0087726
TDWR Permit No. 02496

AUTHORIZATION TO DISCHARGE UNDER THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM

In compliance with the provisions of the Federal Water Pollution Control Act, as amended, (33 U.S.C. 1251 et. seq; the "Act"),

Southwestern Electric Power Company
P.O. Box 21106
Shreveport, Louisiana 71156

PROPOSED PERMIT

is authorized to discharge from a facility located at

H.W. Pirkey S.E.S.
Hallsville, Harrison County, Texas

to receiving waters named

Sabine River

in accordance with effluent limitations, monitoring requirements and other conditions set forth in Parts I, II, and III hereof.

This permit shall become effective on

This permit and the authorization to discharge shall expire at midnight,

Signed this day of

Myron O Knudson
Myron O. Knudson, P.E.
Director, Water Management Division (6W)

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

During the period beginning effective date and lasting through expiration of this permit the permittee is authorized to discharge from outfall(s) serial number(s) 001, intermittent flow, Brandy Branch Reservoir.

Such discharges shall be limited and monitored by the permittee as specified below:

Effluent Characteristic	Discharge Limitations				Monitoring Requirements	
	kg/day (lbs/day)		Other Units (Specify)			
	Daily Avg	Daily Max	Daily Avg	Daily Max	Measurement Frequency	Sample Type
Flow—m³/Day (MGD)	N/A	N/A	(Report)	(Report)	1/day**	Estimate
Temperature, degrees	N/A	N/A	33.9C(93F)	35.6C(96F)*	1/week**	In Situ

* Instantaneous maximum.
** When discharge occurs.

The pH shall not be less than N/A standard units nor greater than N/A standard units and shall be monitored N/A

There shall be no discharge of floating solids or visible foam in other than trace amounts.

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s): At Outfall 001 where Brandy Branch Reservoir discharges from either the service outlet or the spillway to Brandy Branch.

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

During the period beginning effective date and lasting through the expiration of this permit, the permittee is authorized to discharge from outfall(s) serial number(s) 002, condenser cooling water and previously monitored effluents.

Such discharges shall be limited and monitored by the permittee as specified below:

Effluent Characteristic	Discharge Limitations				Monitoring Requirements	
	kg/day (lbs/day)		Other Units (Specify)			
	Daily Avg	Daily Max	Daily Avg	Daily Max	Measurement Frequency	Sample Type
Flow—m^3/Day (MGD)	N/A	N/A	(600)	(600)	1/day	Continuous/Record****
Temperature, degrees	N/A	N/A	(Report)	50C(122F)**	1/day	In Situ
Free Available Chlorine*	N/A	N/A	0.2 mg/l	0.5 mg/l	1/week***	Grab

* See Part III, Paragraph 3 and 4.
** Instantaneous maximum.
*** Samples shall be representative of periods of chlorination.
**** Flow shall be calculated from pump curve data.

The pH shall not be less than N/A standard units nor greater than N/A standard units and shall be monitored N/A

There shall be no discharge of floating solids or visible foam in other than trace amounts.

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s): At Outfall 002, where condenser cooling water and previously monitored effluents are discharged from the discharge canal to Brandy Branch Reservoir.

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

During the period beginning effective date and lasting through expiration of this permit, the permittee is authorized to discharge from outfall(s) serial number(s) 003 ash transport water*, commingled with previously monitored effluents.

Such discharges shall be limited and monitored by the permittee as specified below:

Effluent Characteristic	Discharge Limitations				Monitoring Requirements	
	kg/day (lbs/day)		Other Units (Specify)			
	Daily Avg	Daily Max	Daily Avg	Daily Max	Measurement Frequency	Sample Type
Flow—m^3/Day (MGD)	N/A	N/A	(Report)	N/A	1/day	Totalized
Total Suspended Solids	23.9(52.5)	N/A	30 mg/l	100mg/l	1/week	Grab
Oil and Grease	12.0(26.3)	N/A	15 mg/l	20mg/l	1/week	Grab
Selenium	N/A	N/A	0.05 mg/l	0.10 mg/l	1/week	Grab

* See Part III, Paragraph 5.

The pH shall not be less than 6.0 standard units nor greater than 9.0 standard units and shall be monitored 1/week by grab sample.

There shall be no discharge of floating solids or visible foam in other than trace amounts.

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s):

At Outfall 003 where ash transport water and previously monitored effluents are discharged from the bottom ash pond/treatment system.

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

During the period beginning effective date and lasting through expiration of this permit, the permittee is authorized to discharge from outfall(s) serial number(s) 004, boiler blowdown.

Such discharges shall be limited and monitored by the permittee as specified below:

Effluent Characteristic	Discharge Limitations				Monitoring Requirements	
	kg/day (lbs/day)		Other Units (Specify)			
	Daily Avg	Daily Max	Daily Avg	Daily Max	Measurement Frequency	Sample Type
Flow—m^3/Day (MGD)	N/A	N/A	(Report)	N/A	1/day	Estimate
Total Suspended Solids	N/A	N/A	30 mg/l	100 mg/l	1/week	Grab
Oil and Grease	N/A	N/A	15 mg/l	20 mg/l	1/week	Grab
Iron, Total	N/A	N/A	1 mg/l	1 mg/l	1/week	Grab
Copper, Total	N/A	N/A	1 mg/l	1 mg/l	1/week	Grab

The pH shall not be less than N/A standard units nor greater than N/A standard units and shall be monitored N/A (pH monitored at Outfall 003)

There shall be no discharge of floating solids or visible foam in other than trace amounts.

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s): At Outfall 004, where boiler blowdown is discharged prior to mixing with any other waste stream.

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

During the period beginning effective date and lasting through expiration of this permit, the permittee is authorized to discharge from outfall(s) serial number(s) 005, low volume wastewater*.

Such discharges shall be limited and monitored by the permittee as specified below:

Effluent Characteristic	Discharge Limitations				Monitoring Requirements	
	kg/day (lbs/day)		Other Units (Specify)			
	Daily Avg	Daily Max	Daily Avg	Daily Max	Measurement Frequency	Sample Type
Flow—m³/Day (MGD)	N/A	N/A	(Report)	N/A	1/day	Estimate
Total Suspended Solids	N/A	N/A	30 mg/1	100 mg/1	1/week	Grab
Oil and Grease	N/A	N/A	15 mg/1	20 mg/1	1/week	Grab

* See Part III, Paragraph 7.

The pH shall not be less than 6.0 standard units nor greater than 9.0 standard units and shall be monitored 1/week by grab sample.

There shall be no discharge of floating solids or visible foam in other than trace amounts.

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s):
At Outfall 005 where low volume wastewater is discharged from the collector pit/wastewater treatment system prior to mixing with any other waste stream.

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

During the period beginning effective date and lasting through expiration of this permit, the permittee is authorized to discharge from outfall(s) serial number(s) 006, material storage runoff water*.

Such discharges shall be limited and monitored by the permittee as specified below:

Effluent Characteristic	Discharge Limitations				Monitoring Requirements	
	kg/day (lbs/day)		Other Units (Specify)			
	Daily Avg	Daily Max	Daily Avg	Daily Max	Measurement Frequency	Sample Type
Flow—m^3/Day (MGD)	N/A	N/A	N/A	(Report)	1/week	Estimate
Total Suspended Solids	N/A	N/A	N/A	50 mg/l	1/week**	Grab
Selenium	N/A	N/A	N/A	0.2 mg/l	1/week**	Grab

* See Part III, Paragraphs 8 through 12.
** When discharge occurs.

The pH shall not be less than 6.0 standard units nor greater than 9.0 standard units and shall be monitored 1/week** by grab sample.

There shall be no discharge of floating solids or visible foam in other than trace amounts.

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s): At Outfall 006 where area runoff water is discharged from the runoff basin/treatment system prior to mixing with any other waste stream.

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

During the period beginning effective date and lasting through expiration of this permit, the permittee is authorized to discharge from outfall(s) serial number(s) 007, metal cleaning wastewater*.

Such discharges shall be limited and monitored by the permittee as specified below:

Effluent Characteristic	Discharge Limitations				Monitoring Requirements	
	kg/day (lbs/day)		Other Units (Specify)			
	Daily Avg	Daily Max	Daily Avg	Daily Max	Measurement Frequency	Sample Type
Flow—m^3/Day (MGD)	N/A	N/A	(Report)	N/A	1/day	Estimate
Total Suspended Solids	N/A	N/A	30 mg/l	100 mg/l	1/week	Grab
Oil and Grease	N/A	N/A	15 mg/l	20 mg/l	1/week	Grab
Iron, Total	N/A	N/A	1 mg/l	1 mg/l	1/week	Grab
Copper, Total	N/A	N/A	1 mg/l	1 mg/l	1/week	Grab

* See Part III, Paragraph 6.

The pH shall not be less than 6.0 standard units nor greater than 9.0 standard units and shall be monitored 1/week by grab sample.

There shall be no discharge of floating solids or visible foam in other than trace amounts.

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s): At Outfall 007 or where metal cleaning wastewater is discharged from the treatment facility prior to mixing with any other waste stream.

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

During the period beginning effective date and lasting through expiration date, the permittee is authorized to discharge from outfall(s) serial number(s) 008, intermittent flow, sewage treatment plant effluents***.

Such discharges shall be limited and monitored by the permittee as specified below:

Effluent Characteristic	Discharge Limitations				Monitoring Requirements	
	kg/day (lbs/day)		Other Units (Specify)			
	Daily Avg	Daily Max	Daily Avg	Daily Max	Measurement Frequency	Sample Type
Flow—m^3/Day (MGD)	N/A	N/A	(Report)	(Report)	1/day	Estimate
Biochemical Oxygen Demand (5-day)	1.2(2.5)	N/A	20 mg/1	65 mg/1*	1/week**	Grab
Total Suspended Solids	1.2(2.5)	N/A	20 mg/1	65 mg/1*	1/week**	Grab

* Instantaneous maximum.

** When discharging.

*** This waste stream shall be chlorinated sufficiently to maintain a 1.0 mg/1 chlorine residual after at least 20 minutes contact time (based on peak flow).

The pH shall not be less than 6.0 standard units nor greater than 9.0 standard units and shall be monitored 1/week** by grab sample.

There shall be no discharge of floating solids or visible foam in other than trace amounts.

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s): At Outfall 008 at the flow measuring device after the chlorination chamber, prior to mixing with any other waters.

SECTION B. SCHEDULE OF COMPLIANCE

The permittee shall achieve compliance with the effluent limitations specified for discharges in accordance with the following schedule:

None.

PART II
STANDARD CONDITIONS FOR NPDES PERMITS

SECTION A. GENERAL CONDITIONS

1. Duty to Comply

The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Clean Water Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application.

2. Penalties for Violations of Permit Conditions

The Clean Water Act provides that any person who violates a permit condition implementing sections 301, 302, 306, 307, 308, 318, or 405 of the Clean Water Act is subject to a civil penalty not to exceed $10,000 per day of such violation. Any person who willfully or negligently violates permit conditions implementing sections 301, 302, 306, 307, or 308 of the Clean Water Act is subject to a fine of not less than $2,500 nor more than $25,000 per day of violation, or by imprisonment for not more than 1 year, or both.

3. Duty to Mitigate

The permittee shall take all reasonable steps to minimize or correct any adverse impact on the environment resulting from noncompliance with this permit, including such accelerated or additional monitoring as necessary to determine the nature and impact of the noncomplying discharge.

4. Permit Actions

This permit may be modified, revoked and reissued, or terminated for cause including, but not limited to, the following:

a. Violation of any terms or conditions of this permit;

b. Obtaining this permit by misrepresentation or failure to disclose fully all relevant facts; or

c. A change in any condition that requires either a temporary or permanent reduction or elimination of the authorized discharge.

The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance, does not stay any permit condition.

5. Toxic Pollutants

Notwithstanding paragraph A-4, above, if a toxic effluent standard or prohibition (including any schedule of compliance specified in such effluent standard or prohibition) is established under Section 307(a) of the Act for a toxic pollutant which is present in the discharge and such standard or prohibition is more stringent than any limitation for such pollutant in this permit, this permit shall be modified or revoked and reissued to conform to the toxic effluent standard or prohibition and the permittee so notified.

The permittee shall comply with effluent standards or prohibitions established under section 307(a) of the Clean Water Act for toxic pollutants within the time provided in the regulations that establish those standards or prohibitions, even if the permit has not yet been modified to incorporate the requirement.

6. Civil and Criminal Liability

Except as provided in permit conditions on "Bypassing" Section B, Paragraph B-3 and "Upsets" Section B, Paragraph B-4, nothing in this permit shall be construed to relieve the permittee from civil or criminal penalties for noncompliance.

7. Oil and Hazardous Substance Liability

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties to which the permittee is or may be subject under Section 311 of the Act.

8. State Laws

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties established pursuant to any applicable State law or regulation under authority preserved by Section 510 of the Act.

9. Property Rights

The issuance of this permit does not convey any property rights of any sort, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of Federal, State or local laws or regulations.

10. Severability

The provisions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.

SECTION B. OPERATION AND MAINTENANCE OF POLLUTION CONTROLS

1. Proper Operation and Maintenance

The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance includes effective performance, adequate funding, adequate operator staffing and training, and adequate laboratory and process controls, including appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems only when necessary to achieve compliance with the conditions of the permit.

2. Duty to Halt or Reduce Activity

Upon reduction, loss, or failure of the treatment facility, the permittee shall, to the extent necessary to maintain compliance with its permit, control production or all discharges or both until the facility is restored or an alternative method of treatment is provided. This requirement applies, for example, when the primary source of power of the treatment facility fails or is reduced or lost. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

3. Bypass of Treatment Facilities

a. Definitions

(1) "Bypass" means the intentional diversion of waste streams from any portion of a treatment facility.

(2) "Severe property damage" means substantial physical damage to property, damage to the treatment facilities which causes them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.

b. Bypass not exceeding limitations. The permittee may allow any bypass to occur which does not cause effluent limitations to be exceeded, but only if it also is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions of paragraphs c and d of this section.

c. Notice

(1) Anticipated bypass. If the permittee knows in advance of the need for a bypass, it shall submit prior notice, if possible at least ten days before the date of the bypass.

(2) Unanticipated bypass. The permittee shall submit notice of an unanticipated bypass as required in Section D, Paragraph D-6 (24-hour notice).

d. Prohibition of bypass.

(1) Bypass is prohibited and the Director may take enforcement action against a permittee for bypass, unless:

(a) Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;

(b) There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if the permittee could have installed adequate backup equipment to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance; and

(c) The permittee submitted notices as required under paragraph c of this section.

(2) The Director may approve an anticipated bypass, after considering its adverse effects, if the Director determines that it will meet the three conditions listed above in paragraph d(1) of this section.

4. Upset Conditions

a. Definition. "Upset" means an exceptional incident in which there is unintentional and temporary noncompliance with technology-based permit effluent limitations because of factors beyond the reasonable control of the permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.

b. Effect of an upset. An upset constitutes an affirmative defense to an action brought for noncompliance with such technology-based permit effluent limitations if the requirements of paragraph c of this section are met. No determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is final administrative action subject to judicial review.

c. Conditions necessary for a demonstration of upset. A permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that:

(1) An upset occurred and that the permittee can identify the specific cause(s) of the upset;

(2) The permitted facility was at the time being properly operated; and

(3) The permittee submitted notice of the upset as required in Section D, Paragraph D-6.

(4) The permittee complied with any remedial measures required under Section A, Paragraph A-3.

d. Burden of proof. In any enforcement proceeding the permittee seeking to establish the occurrence of an upset has the burden of proof.

5. Removed Substances

Solids, sludges, filter backwash, or other pollutants removed in the course of treatment of control of wastewaters shall be disposed of in a manner such as to prevent any pollutant from such materials from entering navigable waters.

SECTION C. MONITORING AND RECORDS

1. Representative Sampling

Samples and measurements taken as required herein shall be representative of the volume and nature of the monitored discharge. All samples shall be taken at the monitoring points specified in this permit and, unless otherwise specified, before the effluent joins or is diluted by any other wastestream, body of water, or substance. Monitoring points shall not be changed without notification to and the approval of the Director.

2. Flow Measurements

Appropriate flow measurement devices and methods consistent with accepted scientific practices shall be selected and used to insure the accuracy and reliability of measurements of the volume of monitored discharges. The devices shall be installed, calibrated and maintained to insure that the accuracy of the measurements are consistent with the accepted capability of that type of device. Devices selected shall be capable of measuring flows with a maximum deviation of less than ± 10% from true discharge rates throughout the range of expected discharge volumes. Guidance in selection, installation, calibration and operation of acceptable flow measurement devices can be obtained from the following references:

a. "A Guide to Methods and Standards for the Measurement of Water Flow", U. S. Department of Commerce, National Bureau of Standards, NBS Special Publication 421, May 1975, 97 pp. (Available from the U. S. Government Printing Office, Washington, D. C. 20402. Order by SD catalog No. C13.10:421).

b. "Water Measurement Manual", U. S. Department of Interior, Bureau of Reclamation, Second Edition, Revised Reprint, 1974, 327 pp. (Available from the U. S. Government Printing Office, Washington, D. C. 20402. Order by Catalog No. I27.19/2:W29/2, Stock No. S/N 24003-0027).

c. "Flow Measurement in Open Channels and Closed Conduits, U. S. Department of Commerce, National Bureau of Standards, NBS Special Publication 484, October 1977, 982 pp. (Available in paper copy or microfiche from National Technical Information Service (NTIS), Springfield, VA 22151. Order by NTIS No. PB-273 535/5ST).

d. "NPDES Compliance Sampling Manual", U. S. Environmental Protection Agency, Office of Water Enforcement, Publication MCD-51, 1977, 140 pp. (Available from the General Services Administration (8FFS), Centralized Mailing Lists Services, Building 41, Denver Federal Center, Denver, CO 80225.)

3. Monitoring Procedures

Monitoring must be conducted according to test procedures approved under 40 CFR Part 136, unless other test procedures have been specified in this permit.

4. Penalties for Tampering

The Clean Water Act provides that any person who falsifies, tampers with, or knowingly renders inaccurate, any monitoring device or method required to be maintained under this permit shall, upon conviction, be punished by a fine of not more than $10,000 per violation, or by imprisonment for not more than 6 months per violation, or by both.

5. Reporting of Monitoring Results

Monitoring results must be reported on a Discharge Monitoring Report (DMR) form (EPA No. 3320-1). Monitoring results obtained during the previous months shall be summarized for each month and reported on a DMR form postmarked no later than the 28th day of the month following the completed reporting period. The first report is due ________________. Duplicate copies of DMR's signed and certified as required by Section D, Paragraph D-11, and all other reports required by Section D, Reporting Requirements, shall be submitted to the Regional Administrator

Myron O. Knudson, P.E.
Director, Water Management Division (6W)
U.S. Environmental Protection Agency
Region VI
First International Building
Dallas, Texas 75270

6. Additional Monitoring by the Permittee

If the permittee monitors any pollutant more frequently than required by this permit, using test procedures approved under 40 CFR 136 or as specified in this permit, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the DMR. Such increased frequency shall also be indicated.

7. Averaging of Measurements

Calculations for all limitations which require averaging of measurements shall utilize an arithmetic mean unless other wise specified by the Director in the permit.

8. Retention of Records

The permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit, for a period of at least 3 years from the date of the sample, measurement, report or application. This period may be extended by request of the Director at any time.

9. Record Contents

Records of monitoring information shall include:

a. The date, exact place, time and methods of sampling or measurements;

b. The individual(s) who performed the sampling or measurements;

c. The date(s) analyses were performed;

d. The individual(s) who performed the analyses;

e. The analytical techniques or methods used; and

f. The results of such analyses.

10. Inspection and Entry

The permittee shall allow the Director, or an authorized representative, upon the presentation of credentials and other documents as may be required by law, to:

a. Enter upon the permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit;

b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;

c. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit, and

d. Sample or monitor at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by the Clean Water Act, any substances or parameters at any location.

SECTION D. REPORTING REQUIREMENTS

1. Planned Changes

The permittee shall give notice to the Director as soon as possible of any planned physical alterations or additions to the permitted facility.

2. Anticipated Noncompliance

The permittee shall give advance notice to the Director of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements.

3. Transfers

This permit is nontransferable to any person except after notice to the Director. The Director may require modification or revocation and reissuance of the permit to change the name of the permittee and incorporate such other requirements as may be necessary under the Clean Water Act.

4. Monitoring Reports

Monitoring results shall be reported at the intervals and in the form specified in Section C, Paragraph C-5 (Monitoring).

5. Compliance Schedules

Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this permit shall be submitted no later than 14 days following each schedule date. Any reports of noncompliance shall include the cause of noncompliance, any remedial actions taken, and the probability of meeting the next scheduled requirement.

6. Twenty-Four Hour Reporting

The permittee shall report any noncompliance which may endanger health or the environment. Any information shall be provided orally within 24 hours from the time the permittee becomes aware of the circumstances. A written submission shall also be provided within 5 days of the time the permittee becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance. The Director may waive the written report on a case-by-case basis if the oral report has been received within 24 hours.

The following shall be included as information which must be reported within 24 hours:

a. Any unanticipated bypass which exceeds any effluent limitation in the permit.

b. Any upset which exceeds any effluent limitation in the permit.

c. Violation of a maximum daily discharge limitation for any of the pollutants listed by the Director in Part III of the permit to be reported within 24 hours.

7. Other Noncompliance

The permittee shall report all instances of noncompliance not reported under Section D, Paragraphs D-1, D-4, D-5, and D-6 at the time monitoring reports are submitted. The reports shall contain the information listed in Paragraph D-6.

8. Changes in Discharges of Toxic Substances

The permittee shall notify the Director as soon as it knows or has reason to believe:

a. That any activity has occurred or will occur which would result in the discharge of any toxic pollutant which is not limited in the permit, if that discharge will exceed the "notification levels" described in 40 CFR 122.61.

b. That they have begun or expect to begin to use or manufacture as an intermediate or final product or byproduct any toxic pollutant which was not reported in the permit application.

9. Duty to Provide Information

The permittee shall furnish to the Director, within a reasonable time, any information which the Director may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The permittee shall also furnish to the Director, upon request, copies of records required to be kept by this permit.

10. Duty to Reapply

If the permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the permittee must apply for and obtain a new permit. The application should be submitted at least 180 days before the expiration date of this permit. The Director may grant permission to submit an application less than 180 days in advance but no later than the permit expiration date.

11. Signatory Requirements

All applications, reports or information submitted to the Director shall be signed and certified.

a. All permit applications shall be signed as follows:

(1) For a corporation: by a principal executive officer of at least the level of vice-president;

(2) For a partnership or sole proprietorship: by a general partner or the proprietor, respectively; or

(3) For a municipality, State, Federal, or other public agency: by either a principal executive officer or ranking elected official.

b. All reports required by the permit and other information requested by the Director shall be signed by a person described above or by a duly authorized representative of that person. A person is a duly authorized representative only if:

(1) The authorization is made in writing by a person described above.

(2) The authorization specified either an individual or a position having responsibility for the overall operation of the regulated facility or activity, such as the position of plant manager, operator of a well or a well field, superintendent, or position of equivalent responsibility. (A duly authorized representative may thus be either a named individual or any individual occupying a named position.); and

(3) Certification. Any person signing a document under this section shall make the following certification:

> "I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment."

12. Availability of Reports

Except for data determined to be confidential under 40 CFR Part 2, all reports prepared in accordance with the terms of this permit shall be available for public inspection at the offices of the State water pollution control agency and the Regional Administrator. As required by the Act, permit applications, permits and effluent data shall not be considered confidential.

13. Penalties for Falsification of Reports

The Clean Water Act provides that any person who knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this permit, including monitoring reports or reports of compliance or noncompliance shall, upon conviction, be punished by a fine of not more than $10,000 per violation, or by imprisonment for not more than 6 months per violation, or by both.

PART III
OTHER CONDITIONS

1. For the purpose of Part I of this permit, the following definitions shall apply in lieu of those under "Part I, Section C, 'Monitoring and Reporting'", where limitations are expressed in concentration:
   a. The "daily average" concentration means the arithmetic average (weighted by flow value) of all the daily determinations of concentration made during a calendar month. Daily determinations of concentration made using a composite sample shall be the concentration of the composite sample. When grab samples are used, the daily determination of concentration shall be the arithmetic average (weighted by flow value) of all the samples collected during that calendar day.
   b. The "daily maximum" concentration means the daily determination of concentration for any calendar day.

2. The conditions applicable to all permits under 40 CFR 122.7, 122.15, 122.60, 122.61, and 122.62 (as promulgated in the May 19, 1980 Federal Register) are hereby incorporated into this permit and prevail over any inconsistent requirements of this permit.

3. Noncompliance reporting for upsets and bypasses shall be made within 24 hours to EPA Region 6 followed by a written report in five days. Violations of daily maximum limitations for pollutants listed below will also be reported in 24 hours followed by a written report in five days. Violations of daily maximum limitations for all other pollutants identified elsewhere in this permit shall be reported in writing within five days.

4. There shall be no discharge of polychlorinated byphenyl transformer fluid.

5. Daily average temperature is defined as the flow weighted average temperature (FWAT) and shall be computed and recorded on a daily basis. FWAT shall be computed at equal time intervals not greater than two hours. The method of calculating FWAT is as follows:

$$\text{FWAT} = \frac{\text{SUMMATION (INSTANTANEOUS FLOW X INSTANTANEOUS TEMPERATURE)}}{\text{SUMMATION (INSTANTANEOUS FLOW)}}$$

6. The term "free available chlorine" shall mean the value obtained using the amperometric titration method for free available chlorine described in "Standard Methods for the Examination of Water and Wastewater", page 112 (13th edition).

   Neither free available chlorine nor total residual chlorine may be discharged from any unit for more than two hours in any one day and not more than one unit in any plant may discharge free available or total residual chlorine at any one time unless the permittee can demonstrate to the permitting Agency that the units in a particular location cannot operate at or below the limitations specified in this permit.

PART III
OTHER CONDITIONS

7. The term "ash transport water" shall mean water used in the transport of either fly ash or bottom ash.

8. The term "metal cleaning wastes" shall mean any cleaning compounds, rinse waters, or other waterborne residues derived from cleaning any metal process equipment including, but not limited to, boiler tube cleaning, boiler fireside cleaning and air preheater cleaning.

9. The term "low-volume waste sources" means, wastewaters from, but not limited to: wet scrubber air pollution control systems, ion exchange water treatment system, water treatment, evaporator and boiler blowdown, laboratory and sampling streams, floor drainage, cooling tower basin cleaning wastes and blowdown from recirculating house service water systems.

10. The term "area runoff" means discharges resulting from material storage runoff and construction runoff.

11. The term "material storage runoff" means the rainfall runoff from or through any coal, ash or other material storage pile.

12. The term "construction runoff" means the rainfall runoff from any construction activity and any earth surface disturbed by such activity from the inception of construction until construction is complete and any disturbed earth is returned to a vegetative or other cover commensurate with the intended land use.

13. Any untreated overflow from facilities designed, constructed and operated to treat the volume of "material storage runoff" and "construction runoff" which is associated with a 10 year, 24-hour rainfall event shall not be subject to the limitations specified in Part 1, area runoff, of this permit.

14. The term "10 year, 24-hour rainfall event" shall mean a rainfall event with a probable recurrence interval of once in ten years as defined by the National Weather Service in Technical Paper No. 40, "Rainfall Frequency Atlas of the United States", May 1961, and subsequent amendments, or equivalent regional or state rainfall probability information developed therefrom.

15. The Memorandum of Agreement executed by EPA, the Advisory Council on Historic Preservation, and the Texas State Historic Preservation Officer for the steam electric generating plant which is the subject of this permit is hereby incorporated by reference and expressly made a part of this permit. The permittee shall comply with the stipulations of such Memorandum of Agreement.

APPENDIX B

NPDES Permit for the South Hallsville Surface Lignite Mine

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION VI
1201 ELM STREET
DALLAS, TEXAS 75270

CERTIFIED MAIL: RETURN RECEIPT REQUESTED (P26 4777641)

Mr. Clifford R. Miercort
President, Sabine Mining co.
13140 Coit Road, Suite 400
Dallas, Texas 75240

Re: Application to Discharge to Waters of the United States
Permit No. TX0088935

Dear Mr. Miercort:

Enclosed is the public notice, fact sheet, and a copy of the permit which this Agency has drafted under the authority of the National Pollutant Discharge Elimination System. A copy of the final permit will be mailed to you when the Agency has made a final permit decision.

Should you have any questions concerning any part of the permit, please feel free to contact the Permits Branch at the above address or telephone (214) 767-4375.

Sincerely,

Myron O. Knudson

Myron O. Knudson, P.E.
Director, Water Management Division (6W)

Enclosures

cc w/permit copy:
Texas Department of Water Resources

B-1a

NPDES authorization to discharge to waters of the United States, permit No. TX0088935.

The applicant's mailing address is:

The Sabine Mining Company
13140 Coit Road, Suite 400
Dallas, Texas 75240

The discharge from this new source facility is made into Hatley Creek, Hardin Creek, Rodgers Creek or Mason Creek, all tributaries of the Sabine River, Segment No. 505 of the Sabine River Basin, a water of the United States classified for non-contact recreation, propagation of fish and wildlife, and domestic raw water supply. The discharge is located on that water south of the City of Hallsville, bordered on the north by Farm to Market Road 968 and Interstate Highway 20 at their intersection and on the south by the Sabine River. A fact sheet is available. Under the standard industrial classification (SIC) code 1211, the applicant's activities are the surface mining of lignite.

The Regional Administrator made an initial determination that The Sabine Mining Co.'s lignite mine would be a new source as defined in Section 306 of the Clean Water Act. This determination was not appealed and subsequently became the final determination that the facility would be a new source. The National Environmental Policy Act is applicable to the issuance of new source NPDES permits. After a careful review, EPA has concluded that the issuance of this permit will be a major federal action significantly affecting the quality of the human environment. Consequently, an Environmental Impact Statement (EIS) will be prepared. A Draft EIS has been filed with EPA, Office of Federal Activities. A limited number of copies are available upon request from Mr. Clinton B. Spotts, Environmental Protection Agency, 1201 Elm Street, Dallas, Texas 75270. Comments received on the statement will be considered in making a determination regarding issuance of the proposed permit.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION VI
1201 ELM STREET
DALLAS, TEXAS 75270

FACT SHEET

For proposed National Pollutant Discharge Elimination System (NPDES) permit No. TX0088935 to discharge to waters of the United States.

Issuing office:	U. S. Environmental Protection Agency Region VI First International Building 1201 Elm Street Dallas, Texas 75270
Applicant:	The Sabine Mining Company 13140 Coit Road, Suite 400 Dallas, Texas 75240

1. The applicant currently proposes to operate the South Hallsville No. 1 Mine.

2. As described in the application, the plant site is located in Harrison County, Texas. Discharge is to Hatley Creek, Hardin Creek, Rodgers Creek, Clarks Creek or Mason Creek, all tributaries of the Sabine River in segment No. 505 of the Sabine River Basin.

3. The known uses of the receiving waters are:

Non-contact recreation. Propagation of fish and wildlife. Domestic raw water supply.

4. Stream standards are:

The general criteria and numerical criteria which make up the stream standards are provided in "Texas Water Quality Standards," Texas Water Quality Board, February 1976 (Texas Department of Water Resources Publication GP-3-1, February 1978).

5. The following is a quantitative description of the discharge described in the application:

	Outfall	Flow Frequency	Avg/Daily (MGD)	Max/(MGD)	Min/(MGD)
a.	001-010	Intermittent	N/A	N/A	N/A

	Outfall	Temp. °F Avg/Summer	Temp. °F Avg/Winter	Temp. °F Max	Temp. °F Min
b.	001-010	65.0	55.0	70.0	50.0

c.

Outfall	Parameter	Effluent Characteristics Daily Avg (mg/l)	Effluent Characteristics Daily Max (mg/l)
001-010	Total Suspended Solids	<35.0 mg/l	<70.0 mg/l
	Total Iron	<3.5 mg/l	7.0 mg/l
	Manganese	<2.0 mg/l	4.0 mg/l

pH within the range of 6.0 to 8.0 standard units.

6. On the basis of preliminary staff review, the Environmental Protection Agency, after consultation with the State of Texas, has made a tentative determination to issue a permit for the discharge described in the application.

7. The proposed effluent limitations for those pollutants proposed to be limited are as shown in the attached draft permit.

8. A brief explanation follows of the express statutory or regulatory provision on which permit requirements are based, including appropriate supporting references to the Administrative Record required by 40 CFR §124.35:

a. Effluent Guidelines and Standards for the Coal Mining Point Source Category, 40 CFR Part 434.

b. NPDES application number TX0088935, submitted by The Sabine Mining Company on August 6, 1981, for the South Hallsville No. 1 mine.

c. Texas Surface Water Quality Standards, LP-71, dated April, 1981, as issued by the Texas Department of Water Resources.

d. Hazardous Metals Board Order No. 75-1125-5, as issued by the Texas Water Quality Board on November 25, 1975.

9. The following is an explanation of calculations or other necessary explanation of the derivation of specific effluent limitations and conditions, including a citation to the applicable guidelines of standard provisions as required under 40 CFR §122.15 and reasons why these are applicable:

Outfall 011 is a discharge of domestic sewage effluent from an activated sludge package plant. Limits were set using standard 20-20 limitations.

Outfalls 001 through 010 result from sedimentation ponds containing mine water and rainfall runoff. Limits for Total Suspended Solids and Iron were set according to EPA Guidelines, Federal Register Vol. 46, No. 103, Section 434.35 (N.S.). Limits for Manganese were set using TDWR Rule 156.19.05.002 on Hazardous Metals. These outfalls were set up as a combination of ponds since the initial mine area contains 48 ponds. This allows composite samples if more than one discharge is occuring within a subwatershed. There is also a clause which allows revision of the subwatersheds upon approval. This allows minor changes without a permit amendment. There is, however, a clause which requires notification to the permitting agencies of the exact pond locations (by coordinates).

10. The permit is in the process of certification by the State agency. A draft permit and draft public notice will be sent to the District Engineer, Corps of Engineers, and to the Regional Director of the U. S. Fish and Wildlife Service, and the National Marine Fisheries Service, prior to the publication of that notice.

11. The public notice describes the procedures for the formulation of final determinations.

Permit No. TX0088935
Application No. TX0088935

AUTHORIZATION TO DISCHARGE UNDER THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM

In compliance with the provisions of the Federal Water Pollution Control Act, as amended, (33 U.S.C. 1251 et. seq; the "Act"),

The Sabine Mining Company
13140 Coit Road, Suite 400
Dallas, Texas 75240

is authorized to discharge from a facility located at South Hallsville No. 1 Mine, Harrison County, Texas

to receiving waters named the Sabine River

PROPOSED PERMIT

in accordance with effluent limitations, monitoring requirements and other conditions set forth in Parts I, II, and III hereof.

This permit shall become effective on

This permit and the authorization to discharge shall expire at midnight,

Signed this day of

Myron O. Knudson, P.E.
Director, Water Management Division (6W)

PART I
REQUIREMENTS FOR NPDES PERMITS

SECTION A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

1. During the period beginning the effective date and lasting through the expiration of this permit the permittee is authorized to discharge from outfall(s) serial number(s) 001 through 010, intermittent discharge from a sedimentation pond.

Such discharges shall be limited and monitored by the permittee as specified below:

Effluent Characteristic	Discharge Limitations			
	kg/day(lbs/day)		Other Units (Specify)	
	Daily Avg	Daily Max	Daily Avg	Daily Max
Flow-m^3/Day(MGD)	N/A	N/A	(*)	(*)
Total Suspended Solids	N/A	N/A	35.0 mg/l	70.0 mg/l
Total Iron	N/A	N/A	3.0 mg/l	6.0 mg/l
Manganese	N/A	N/A	1.0 mg/l	3.0 mg/l

Effluent Characteristic	Monitoring Requirements	
	Measurement Frequency	Sample Type
Flow-m^3/Day(MGD)	One/day	Estimate***
Total Suspended Solids	One/day**	Grab
Total Iron	One/day**	Grab
Manganese	One/day**	Grab

* Report
** When discharge occurs
*** See Part III, paragraph H

The pH shall not be less than 6.0 standard units nor greater than 9.0 standard units and shall be monitored one/day** by grab sample.

There shall be no discharge of floating solids or visible foam in other than trace amounts.

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s): At the outfall from each sedimentation pond, prior to mixing with any stream or entry into any of the tributaries of the Sabine River.

2. During the period beginning the effective date and lasting through the expiration of this permit the permittee is authorized to discharge from outfall(s) serial number(s) 011, domestic sewage discharge.

Such discharges shall be limited and monitored by the permittee as specified below:

Effluent Characteristic	Discharge Limitations			
	kg/day(lbs/day)		Other Units (Specify)	
	Daily Avg	Daily Max	Daily Avg	Daily Max
Flow-m^3/Day(MGD) **	N/A	N/A	(*)	(*)
Biochemical Oxygen Demand (5-day)	0.77(1.7)	N/A	20 mg/l	45 mg/l
Total Suspended Solids	0.77(1.7)	N/A	20 mg/l	45 mg/l

Effluent Characteristic	Monitoring Requirements	
	Measurement Frequency	Sample Type
Flow-m^3/Day(MGD)	2/week	Instantaneous
Biochemical Oxygen Demand (5-day)	1/month	Grab
Total Suspended Solids	1/month	Grab

* Report
** The effluent shall contain a chlorine residual of at least 1.0 mg/l after a detention time of 20 minutes (based on a peak flow), and shall be monitored twice per weekly grab sample. An equivalent method of disinfection may be substituted with prior approval of the permitting authority.

The pH shall not be less than 6.0 standard units nor greater than 9.0 standard units and shall be monitored 1/month by grab sample.

There shall be no discharge of floating solids or visible foam in other than trace amounts.

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s): Following the final treatment unit, prior to entry into Hatleys Creek.

SECTION B. SCHEDULE OF COMPLIANCE

The permittee shall achieve compliance with the effluent limitations specified for discharges in accordance with the following schedule:

NONE

PART II
STANDARD CONDITIONS FOR NPDES PERMITS

SECTION A. GENERAL CONDITIONS

1. Duty to Comply

The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Clean Water Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application.

2. Penalties for Violations of Permit Conditions

The Clean Water Act provides that any person who violates a permit condition implementing sections 301, 302, 306, 307, 308, 318, or 405 of the Clean Water Act is subject to a civil penalty not to exceed $10,000 per day of such violation. Any person who willfully or negligently violates permit conditions implementing sections 301, 302, 306, 307, or 308 of the Clean Water Act is subject to a fine of not less than $2,500 nor more than $25,000 per day of violation, or by imprisonment for not more than 1 year, or both.

3. Duty to Mitigate

The permittee shall take all reasonable steps to minimize or correct any adverse impact on the environment resulting from noncompliance with this permit, including such accelerated or additional monitoring as necessary to determine the nature and impact of the noncomplying discharge.

4. Permit Actions

This permit may be modified, revoked and reissued, or terminated for cause including, but not limited to, the following:

a. Violation of any terms or conditions of this permit;

b. Obtaining this permit by misrepresentation or failure to disclose fully all relevant facts; or

c. A change in any condition that requires either a temporary or permanent reduction or elimination of the authorized discharge.

The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance, does not stay any permit condition.

5. Toxic Pollutants

Notwithstanding paragraph A-4, above, if a toxic effluent standard or prohibition (including any schedule of compliance specified in such effluent standard or prohibition) is established under Section 307(a) of the Act for a toxic pollutant which is present in the discharge and such standard or prohibition is more stringent than any limitation for such pollutant in this permit, this permit shall be modified or revoked and reissued to conform to the toxic effluent standard or prohibition and the permittee so notified.

The permittee shall comply with effluent standards or prohibitions established under section 307(a) of the Clean Water Act for toxic pollutants within the time provided in the regulations that establish those standards or prohibitions, even if the permit has not yet been modified to incorporate the requirement.

6. Civil and Criminal Liability

Except as provided in permit conditions on "Bypassing" Section B, Paragraph B-3 and "Upsets" Section B, Paragraph B-4, nothing in this permit shall be construed to relieve the permittee from civil or criminal penalties for noncompliance.

7. Oil and Hazardous Substance Liability

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties to which the permittee is or may be subject under Section 311 of the Act.

8. State Laws

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties established pursuant to any applicable State law or regulation under authority preserved by Section 510 of the Act.

9. Property Rights

The issuance of this permit does not convey any property rights of any sort, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of Federal, State or local laws or regulations.

10. Severability

The provisions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.

SECTION B. OPERATION AND MAINTENANCE OF POLLUTION CONTROLS

1. Proper Operation and Maintenance

The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance includes effective performance, adequate funding, adequate operator staffing and training, and adequate laboratory and process controls, including appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems only when necessary to achieve compliance with the conditions of the permit.

2. Duty to Halt or Reduce Activity

Upon reduction, loss, or failure of the treatment facility, the permittee shall, to the extent necessary to maintain compliance with its permit, control production or all discharges or both until the facility is restored or an alternative method of treatment is provided. This requirement applies, for example, when the primary source of power of the treatment facility fails or is reduced or lost. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

3. Bypass of Treatment Facilities

a. Definitions

(1) "Bypass" means the intentional diversion of waste streams from any portion of a treatment facility.

(2) "Severe property damage" means substantial physical damage to property, damage to the treatment facilities which causes them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.

b. Bypass not exceeding limitations. The permittee may allow any bypass to occur which does not cause effluent limitations to be exceeded, but only if it also is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions of paragraphs c and d of this section.

c. Notice

(1) Anticipated bypass. If the permittee knows in advance of the need for a bypass, it shall submit prior notice, if possible at least ten days before the date of the bypass.

(2) Unanticipated bypass. The permittee shall submit notice of an unanticipated bypass as required in Section D, Paragraph D-6 (24-hour notice).

d. Prohibition of bypass.

(1) Bypass is prohibited and the Director may take enforcement action against a permittee for bypass, unless:

(a) Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;

(b) There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if the permittee could have installed adequate backup equipment to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance; and

(c) The permittee submitted notices as required under paragraph c of this section.

(2) The Director may approve an anticipated bypass, after considering its adverse effects, if the Director determines that it will meet the three conditions listed above in paragraph d(1) of this section.

4. Upset Conditions

a. Definition. "Upset" means an exceptional incident in which there is unintentional and temporary noncompliance with technology-based permit effluent limitations because of factors beyond the reasonable control of the permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.

b. Effect of an upset. An upset constitutes an affirmative defense to an action brought for noncompliance with such technology-based permit effluent limitations if the requirements of paragraph c of this section are met. No determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is final administrative action subject to judicial review.

c. Conditions necessary for a demonstration of upset. A permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that:

(1) An upset occurred and that the permittee can identify the specific cause(s) of the upset;

(2) The permitted facility was at the time being properly operated; and

(3) The permittee submitted notice of the upset as required in Section D, Paragraph D-6.

(4) The permittee complied with any remedial measures required under Section A, Paragraph A-3.

d. Burden of proof. In any enforcement proceeding the permittee seeking to establish the occurrence of an upset has the burden of proof.

5. Removed Substances

Solids, sludges, filter backwash, or other pollutants removed in the course of treatment or control of wastewaters shall be disposed of in a manner such as to prevent any pollutant from such materials from entering navigable waters.

SECTION C. MONITORING AND RECORDS

1. Representative Sampling

Samples and measurements taken as required herein shall be representative of the volume and nature of the monitored discharge. All samples shall be taken at the monitoring points specified in this permit and, unless otherwise specified, before the effluent joins or is diluted by any other wastestream, body of water, or substance. Monitoring points shall not be changed without notification to and the approval of the Director.

2. Flow Measurements

Appropriate flow measurement devices and methods consistent with accepted scientific practices shall be selected and used to insure the accuracy and reliability of measurements of the volume of monitored discharges. The devices shall be installed, calibrated and maintained to insure that the accuracy of the measurements are consistent with the accepted capability of that type of device. Devices selected shall be capable of measuring flows with a maximum deviation of less than ± 10% from true discharge rates throughout the range of expected discharge volumes. Guidance in selection, installation, calibration and operation of acceptable flow measurement devices can be obtained from the following references:

a. "A Guide to Methods and Standards for the Measurement of Water Flow", U. S. Department of Commerce, National Bureau of Standards, NBS Special Publication 421, May 1975, 97 pp. (Available from the U. S. Government Printing Office, Washington, D. C. 20402. Order by SD catalog No. C13.10:421).

b. "Water Measurement Manual", U. S. Department of Interior, Bureau of Reclamation, Second Edition, Revised Reprint, 1974, 327 pp. (Available from the U. S. Government Printing Office, Washington, D. C. 20402. Order by Catalog No. I27.19/2:W29/2, Stock No. S/N 24003-0027).

c. "Flow Measurement in Open Channels and Closed Conduits, U. S. Department of Commerce, National Bureau of Standards, NBS Special Publication 484, October 1977, 982 pp. (Available in paper copy or microfiche from National Technical Information Service (NTIS), Springfield, VA 22151. Order by NTIS No. PB-273 535/5ST).

d. "NPDES Compliance Sampling Manual", U. S. Environmental Protection Agency, Office of Water Enforcement, Publication MCD-51, 1977, 140 pp. (Available from the General Services Administration [8FFS], Centralized Mailing Lists Services, Building 41, Denver Federal Center, Denver, CO 80225).

3. Monitoring Procedures

Monitoring must be conducted according to test procedures approved under 40 CFR Part 136, unless other test procedures have been specified in this permit.

4. Penalties for Tampering

The Clean Water Act provides that any person who falsifies, tampers with, or knowingly renders inaccurate, any monitoring device or method required to be maintained under this permit shall, upon conviction, be punished by a fine of not more than $10,000 per violation, or by imprisonment for not more than 6 months per violation, or by both.

5. Reporting of Monitoring Results

Monitoring results must be reported on a Discharge Monitoring Report (DMR) form (EPA No. 3320-1). Monitoring results obtained during the previous 3 months shall be summarized for each month and reported on a DMR form postmarked no later than the 28th day of the month following the completed reporting period. The first report is due ________________. Duplicate copies of DMR's signed and certified as required by Section D, Paragraph D-11, and all other reports required by Section D, Reporting Requirements, shall be submitted to the Regional Administrator and the State at the following addresses:

Myron O. Knudson, P.E., Director
Water Management Division (6W)
U.S. Environmental Protection Agency
Region VI
First International Building
1201 Elm Street
Dallas, Texas 75270

6. Additional Monitoring by the Permittee

If the permittee monitors any pollutant more frequently than required by this permit, using test procedures approved under 40 CFR 136 or as specified in this permit, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the DMR. Such increased frequency shall also be indicated.

7. Averaging of Measurements

Calculations for all limitations which require averaging of measurements shall utilize an arithmetic mean unless other wise specified by the Director in the permit.

8. Retention of Records

The permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit, for a period of at least 3 years from the date of the sample, measurement, report or application. This period may be extended by request of the Director at any time.

9. Record Contents

Records of monitoring information shall include:

a. The date, exact place, time and methods of sampling or measurements;

b. The individual(s) who performed the sampling or measurements;

c. The date(s) analyses were performed;

d. The individual(s) who performed the analyses;

e. The analytical techniques or methods used; and

f. The results of such analyses.

10. Inspection and Entry

The permittee shall allow the Director, or an authorized representative, upon the presentation of credentials and other documents as may be required by law, to:

a. Enter upon the permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit;

b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;

c. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit, and

d. Sample or monitor at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by the Clean Water Act, any substances or parameters at any location.

SECTION D. REPORTING REQUIREMENTS

1. Planned Changes

The permittee shall give notice to the Director as soon as possible of any planned physical alterations or additions to the permitted facility.

2. Anticipated Noncompliance

The permittee shall give advance notice to the Director of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements.

3. Transfers

This permit is nontransferable to any person except after notice to the Director. The Director may require modification or revocation and reissuance of the permit to change the name of the permittee and incorporate such other requirements as may be necessary under the Clean Water Act.

4. Monitoring Reports

Monitoring results shall be reported at the intervals and in the form specified in Section C, Paragraph C-5 (Monitoring).

5. Compliance Schedules

Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this permit shall be submitted no later than 14 days following each schedule date. Any reports of noncompliance shall include the cause of noncompliance, any remedial actions taken, and the probability of meeting the next scheduled requirement.

6. Twenty-Four Hour Reporting

The permittee shall report any noncompliance which may endanger health or the environment. Any information shall be provided orally within 24 hours from the time the permittee becomes aware of the circumstances. A written submission shall also be provided within 5 days of the time the permittee becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance. The Director may waive the written report on a case-by-case basis if the oral report has been received within 24 hours.

The following shall be included as information which must be reported within 24 hours:

a. Any unanticipated bypass which exceeds any effluent limitation in the permit.

b. Any upset which exceeds any effluent limitation in the permit.

c. Violation of a maximum daily discharge limitation for any of the pollutants listed by the Director in Part III of the permit to be reported within 24 hours.

7. Other Noncompliance

The permittee shall report all instances of noncompliance not reported under Section D, Paragraphs D-1, D-4, D-5, and D-6 at the time monitoring reports are submitted. The reports shall contain the information listed in Paragraph D-6.

8. Changes in Discharges of Toxic Substances

The permittee shall notify the Director as soon as it knows or has reason to believe:

a. That any activity has occurred or will occur which would result in the discharge of any toxic pollutant which is not limited in the permit, if that discharge will exceed the "notification levels" described in 40 CFR 122.61.

b. That they have begun or expect to begin to use or manufacture as an intermediate or final product or byproduct any toxic pollutant which was not reported in the permit application.

9. Duty to Provide Information

The permittee shall furnish to the Director, within a reasonable time, any information which the Director may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The permittee shall also furnish to the Director, upon request, copies of records required to be kept by this permit.

10. Duty to Reapply

If the permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the permittee must apply for and obtain a new permit. The application should be submitted at least 180 days before the expiration date of this permit. The Director may grant permission to submit an application less than 180 days in advance but no later than the permit expiration date.

11. Signatory Requirements

All applications, reports or information submitted to the Director shall be signed and certified.

a. All permit applications shall be signed as follows:

(1) For a corporation: by a principal executive officer of at least the level of vice-president;

(2) For a partnership or sole proprietorship: by a general partner or the proprietor, respectively; or

(3) For a municipality, State, Federal, or other public agency: by either a principal executive officer or ranking elected official.

b. All reports required by the permit and other information requested by the Director shall be signed by a person described above or by a duly authorized representative of that person. A person is a duly authorized representative only if:

(1) The authorization is made in writing by a person described above.

(2) The authorization specified either an individual or a position having responsibility for the overall operation of the regulated facility or activity, such as the position of plant manager, operator of a well or a well field, superintendent, or position of equivalent responsibility. (A duly authorized representative may thus be either a named individual or any individual occupying a named position.); and

(3) Certification. Any person signing a document under this section shall make the following certification:

> "I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment."

12. Availability of Reports

Except for data determined to be confidential under 40 CFR Part 2, all reports prepared in accordance with the terms of this permit shall be available for public inspection at the offices of the State water pollution and the Regional Administrator. As required by the Act, permit applications, permits and effluent data shall not be considered confidential.

13. Penalties for Falsification of Reports

The Clean Water Act provides that any person who knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this permit, including monitoring reports or reports of compliance or noncompliance shall, upon conviction, be punished by a fine of not more than $10,000 per violation, or by imprisonment for not more than 6 months per violation, or by both.

PART III
OTHER CONDITIONS

A. The "daily average" concentration means the arithmetic average (weighted by flow value) of all the daily determinations of concentration made during a calendar month. Daily determinations of concentration made using a composite sample shall be the concentration of the composite sample. When grab samples are used, the daily determination of concentration shall be the arithmetic average (weighted by flow value) of all the samples collected during that calendar day.

The "daily maximum" concentration means the daily determination of concentration for any calendar day.

B. The initial mine plan (1982-1989) shall be divided into the following subwatersheds for effluent monitoring purposes. Ponds are numbered according to the map "Conceptual Surface Water and Sediment Control Plan" - Figure 3 of the application. The corresponding outfall numbers are as follows:

Outfall	Subwatershed	Pond No.
001	A-1	1984 A1, 1984 A2, 1985 A1, 1985 A2, 1985 A3, 1985 A4, 1985 A5
002	A-2	1986 A1, 1986 A5, 1986 A7, 1987 A2, 1986 A6
003	A-3	1986 A4, 1987 A1, 1987 A3, 1987 A4, 1987 A5
004	B-1	1985 B1, 1985 B2, 1985 B3, 1987 B1, 1988 B1
005	B-2	1985 B4, 1985 B5, 1985 B6, 1985 B6, 1986 B1, 1986 B2
006	B-3	1985 B8, 1985 B9, 1986 B3, 1986 B4,
007	B-4	1985 B10, 1986 B5, 1986 B6, 1986 B7, 1987 B3, 1988 B3
008	B-5	1987 B2, 1988 B2, 1988 B2A, 1989 B2, 1989 B5
009	DEA-1	1982 DE1, 1982 DE2
010	A-4	1983 MF1, 1983 MF2, 1983 MF3

PART III
OTHER CONDITIONS

C. Grab samples from each discharge in a subwatershed may be composited proportional to flow for analysis and accurate records shall be maintained documenting such. Sampling of the discharge is mandatory whenever pumping from the mined area into the sedimentation pond causes the pond to discharge.

D. Subwatersheds may be revised or relocated upon submission of appropriate maps and subsequent approval from the permitting authority.

E. The permitting authority shall be notified within 10 days of the development of each discharge point and given an accurate coordinate description of its location.

F. Upon satisfactory demonstration by the permittee and approval by EPA that this facility is designed, constructed and maintained to contain or treat the volume of water which would fall on the areas covered by this permit during a 10-year 24-hour or larger precipitation event (or snowmelt of equivalent volume), any overflow, increase in volume of a discharge or discharge from a bypass system caused by precipitation or snowmelt shall not be subject to the limitations set forth in Part 1-A of this permit.

G. Drainage which is not from an active mining area shall not be required to meet the limitations set forth in Part 1-A of this permit as long as such drainage is not commingled with untreated mine drainage which is subject to the limitations in Part 1-A of this permit.

H. Methods of flow estimating shall be by the "California Pipe Method" as described in section 7.4.2.2. of the Handbook for Monitoring Industrial Wastewater, August 1973, U.S. Environmental Protection Agency, Technology Transfer.

I. The Memorandum of Agreement executed by EPA, the Advisory Council on Historic Preservation, and the Texas State Historic Preservation Officer for the lignite mine which is the subject of this permit is hereby incorporated by reference and expressly made a part of this permit. The permittee shall comply with the stipulations of such Memorandum of Agreement.

APPENDIX C

Draft Memorandum of Agreement for the Protection of Cultural Resources

RECEIVED
AUG 31 1982
6 ES

AUG 26 1982

Mr. Dick Whittington
Regional Administrator
Environmental Protection Agency
1201 Elm Street
Dallas, Texas 75270

Dear Mr. Whittington:

The Memorandum of Agreement for the H. W. Pirkey Power Plant and South Hallsville Lignite Mine, which may affect historic properties potentially eligible for the National Register has been ratified by the Chairman of the Council. This document constitutes the comments of the Council required by Section 106 of the National Historic Preservation Act and completes compliance with the Council's regulations, "Protection of Historic and Cultural Properties" (36 CFR Part 800). A copy of the Agreement is enclosed.

In accordance with Section 800.6(c)(2) and 800.9(e) of the regulations, a copy of this Memorandum of Agreement should be included in any environmental assessment or statement prepared for this undertaking to meet requirements of the National Environmental Policy Act and should be retained in your records as evidence of compliance with Section 106 of the National Historic Preservation Act.

The Council appreciates your cooperation in reaching a satisfactory resolution of this matter.

Sincerely,

Signed

Thomas F. King
Director, Office of Cultural
Resource Preservation

Advisory
Council On
Historic
Preservation

1522 K Street, NW
Washington, DC 20005

MEMORANDUM OF AGREEMENT

WHEREAS, the Environmental Protection Agency has determined that construction and operation of the H. W. Pirkey Power Plant and the construction and operation of the South Hallsville Lignite Surface Mine may have an effect upon properties eligible for inclusion in the National Register of Historic Places and has requested the comments of the Advisory Council on Historic Preservation, pursuant to Section 106 of the National Historic Preservation Act (16 U.S.C. 470) and its implementing regulations, "Protection of Historic and Cultural Properties" (36 CFR Part 800),

NOW, THEREFORE, the Environmental Protection Agency, the Texas State Historic Preservation Officer, and the Advisory Council on Historic Preservation agree that the undertaking shall be implemented in accordance with the attached proposal in order to take into account the effect of the undertaking on historic properties.

Execution of this Memorandum of Agreement evidences that the Environmental Protection Agency has afforded the Council a reasonable opportunity to comment on the construction and operation of the H. W. Pirkey Power Plant and South Hallsville Lignite Mine and their effects on historic properties and that the Environmental Protection Agency has taken into account the effects of its undertaking on historic properties.

Robert Garvey Aug 19, 1982
Executive Director (date)
Advisory Council on Historic Preservation

Alexander Aldrich 8/23/82
Chairman (date)
Advisory Council on Historic Preservation

PROPOSAL FOR AGREEMENT

1. EPA will incorporate by reference the following conditions into the original and appropriate subsequent NPDES permits for the H.W. Pirkey Power Plant operated by Southwestern Electric Power Company (SWEPCO) and the South Hallsville Surface Lignite Mine operated by Sabine Mining Company (SABINE) in Harrison County, Texas.

   a. Prior to ground disturbing activities for construction, SWEPCO and SABINE will complete intensive historic and cultural surveys of the acreages to be disturbed within the mine, transmission corridors, and highway relocation routes to ensure the identification of all National Register or eligible properties that may be affected directly, or indirectly, by the subsequent construction and maintenance activities in accordance with the standards in 36 CFR Part 66, Appendix B (attached). SWEPCO and SABINE will develop an investigation strategy plan for the survey(s) in consultation with the Texas SHPO, for review and approval. Unless the Texas SHPO notes an objection within 15 working days after receipt, the survey(s) may proceed. If the SHPO notes an objection, the matter will be resolved before a survey proceeds.

   b. The permittee shall provide sufficient documentation to the Texas SHPO about the historic and cultural properties identified by the survey(s) to enable the SHPO to assess the eligibility of the property for inclusion in the National Register of Historic Places. Site forms which include location information shall be provided to the SHPO on a weekly basis as field survey proceeds.

   c. Should the Texas SHPO determine that a property does not meet the criteria for inclusion in the National Register, SWEPCO and SABINE will identify the property on its detailed construction plans and no special protection need be afforded the property when encountered during construction or mining.

   d. Should a property be found to meet the criteria for inclusion in the National Register, and where it is not possible to avoid or to protect it from subsequent construction and related actions, SWEPCO and SABINE will, prior to any ground disturbing activity in the vicinity of the property, treat the property as follows:

      (1) If the property is significant (as documented in the nomination to or determination of eligibility for the National Register) primarily in the data it contains so that retrieval of the data in an appropriate manner may preserve this significance, SWEPCO and SABINE, in consultation with the Texas SHPO, will develop and implement a data recovery program in accordance with the Council's Handbook for the Treatment of Archelogical Properties (attached).

SWEPCO and SABINE will submit a data recovery plan to the Texas SHPO for review and approval prior to its implementation and prior to initiating any action that would affect the property. Unless the Texas SHPO notes an objection within 15 working days after receipt, the data recovery plan may be implemented.

(2) If the property is significant (as documented in the nomination to or determination of eligibility for the National Register) primarily for architectural or historical values, SWEPCO and SABINE will consult with the Texas SHPO to develop a mutually acceptable program which is to be implemented by SWEPCO and SABINE, to ensure preservation, relocation, and/or recordation of the property. If the property is to be relocated or otherwise rehabilitated and preserved, the mitigation program will conform to the Secretary of the Interior's Standards for Rehabilitation.

Prior to demolition or alteration of any such property, SWEPCO and SABINE will record the property so that there will be a permanent record of its present appearance and history. SWEPCO and SABINE will first contact the National Architectural and Engineering Record (NAER) (National Park Service, Department of the Interior, 5000 Marble Street, N.E., Albuquerque, New Mexico 87110 [505] 766-5944) to determine what documentation is required. All documentation must be accepted in writing by NAER prior to the demolition or alteration of the property. SWEPCO and SABINE will also provide copies of this documentation to the Texas SHPO.

e. SWEPCO and SABINE will ensure that all survey, evalution, data recovery, mitigation measures and monitoring will be conducted under the direct supervision of a person(s) who meet, at a minimum, the applicable professional qualifications set forth in 35 CFR Part 66. SWEPCO's and SABINE's consulting archeologist will be present during ground disturbing activities in areas where it can be predicted that subsurface cultural material is likely to occur. The archeologist will train equipment operators to recognize cultural properties should they be encountered in areas where they were not predicted.

f. SWEPCO and SABINE will stop activities that would adversely affect a historic or cultural property that is discovered during construction related operations until the Texas SHPO has been given an opportunity to inspect the property, and whatever preservation or recovery measure that is agreed upon has been completed. Two working days should be allowed for this inspection.

g. SWEPCO and SABINE will provide a draft copy of all reports to the Texas SHPO for review and comment. All reports of work accomplished will meet, in content and form, standards generally expected by historic preservation professionals as portrayed in proposed guidelines 36 CFR, Part 66.

h. SWEPCO and SABINE will provide at least two copies of final reports of the data recovery to the Texas SHPO. A copy of any final technical reports will also be furnished to Interagency Archeological Services (Department of the Interior, Washington, D.C. 20243) for possiblle submission to the National Technical Information Service (TIS). Any precise locational data must appear in a separate appendix and will be withheld from NTIS publication pursuant to Section 11 of the General Authorities Act of 1970, as amended (Public Law 94-453). A copy of any final report will also be furnished to EPA.

i. SWEPCO and SABINE will ensure that all notes, photographs, negatives, and processed data (tables, maps, etc.) will be stored in good order and in a manner that makes them available for future study at an appropriately equipped institution that meets the standards set forth in the proposed 36 CFR Part 66 (copy attached) and that makes these data available to other parties for research or other appropriate purposes.

2. Upon written notice from the Texas SHPO or the Council that any of the conditions of this agreement are being violated, EPA, the Texas SHPO and the Council shall consult to determine how the concern should be resolved.

3. If a signatory determines that the terms of this Agreement cannot be met or believes a change is necessary, the signatory shall immediately request the consulting parties to consider an amendment of the Agreement. Amendments will be executed in the same manner as the original Agreement.

Frances E. Phillips

Environmental Protection Agency (date)

Curtis Tunnell 14 June 1982

Texas State Historic Preservation Officer (date)

PRELIMINARY CASE REPORT on
SWEPCO's H.W. Pirkey Power Plant and
SABINE Mining Co's So. Hallsville Lignite Mine

1. Description of the agency's involvement with the proposed undertaking with citations of the agency's program authority and applicable implementing regulations, procedures, and guidelines:

   Issuance of a new source National Pollutant Discharge Elimination System permit is under consideration by the Environmental Protection Agency, Region 6. Section 402 of the Clean Water Act (33USC et seq.) authorizes EPA to administer NPDES permits to industries that discharge to waters of the United States. New source regulations were published on January 12, 1979, in 40 CFR Part 434; 44 CFR 2589.

   Section 511(c)(1) of the Federal Water Pollution Control Act (FWPCA or P.L. 92-500) as amended by the Clean Water Act of 1977 (P.L. 95-217) mandates that requirements of the National Environmental Policy Act of 1969 (NEPA) apply to the issuance of a permit under Section 402 of the Clean Water Act for discharge of any pollutant by a New Source as defined in Section 306 of P.L. 92-500. Regulations in effect are 40 CFR Part 1500, Council on Environmental Quality Regulations for Implementing the National Environmental Policy Act which were published on November 29, 1978 and 40 CFR Part 6, EPA Regulations for Implementation of Procedures on the National Environmental Policy Act which were published November 6, 1979.

2. Status of this project in the agency's approval process:

   A proposed permit (containing necessary provisions for mitigative measures) will be prepared and distributed to the public after public review of a Final Environmental Impact Statement (EIS). Permit will become effective 30 days after being made public.

3. Status of this project in the agency's NEPA compliance process and the target date for completion of environmental responsibilities:

   The agency is preparing the Final EIS and the environmental review process should be completed in August 1982.

4. A description of the proposed undertaking including, as appropriate, photographs, maps, drawings and specifications:

   Southwestern Electric Power Company (SWEPCO) will construct and operate a 720 MW (gross)/640 MW (net) power plant. In association with the plant there are three 138 kV transmission lines, a make-up water pipeline, and railroad spur. The Sabine Mining Company (SABINE) will construct and operate a 2.8 million-ton-per-year lignite mine under contract to SWEPCO. The proposed mine will be a single-seam, dragline surface mining operation designed to produce lignite for at least 24 years (see attached maps).

5. A description of the National Register or eligible properties affected by the undertaking, including a description of the properties' physical appearance and significance:

There have been only literature and/or partial ground surveys completed for the following project areas: the surface lignite mine, the transmission line corridors, and the highway relocation routes. Based on these limited reports there is potential for additional cultural resources to exist and be adversely affected from construction in these project areas.

6. A brief statement explaining why any of the Criteria of Adverse Effect (800.3) apply:

   For unknown properties that may occur in the mine, transmission corridors and highway relocation routes, 800.3(b)(1) applies, since construction could destroy sites and alter specific properties. 800.3(b)(2) applies where a property maybe avoided, but construction occurs adjacent. It cannot be determined whether 800.3(b)(3) and (b)(4) may apply without a survey(s) of the area.

7. Written views of the State Historic Preservation Officer concerning the effect on the Property:

   See enclosed letters from the Texas State Historic Preservation Officer (attachment).

8. The views of other Federal agencies, State and local governments, and the other groups or individuals when known:

   Views of other groups, individuals or agencies are unknown.

9. A description and analysis of alternatives that would avoid the adverse effects:

   Alteration of alignment and spacing of transportive corridors could avoid specific sites.

10. A description and analysis of alternatives that would mitigate the adverse effects:

    Due to the fact that the lignite mine, the transmission line corridors and the highway relocation routes have had only limited surveys, specific mitigation measures for unknown properties could not be described here. However, data recovery, photographing of resources, excavation and curation of objects and information to be made accessible to the public would be expected as a minimum.

11. An estimate of the cost of the undertaking, identifying Federal and non-Federal shares:

    Costs of construction phase (7-yrs.) is estimated at $109 million (1980 dollars).

    Annual operations expenditures are estimated at $78 million (1980 dollars). No Federal funds are involved.

[illegible]
SECRETARY

JAMES P. BOGART, JR., DALLAS
CARL BOECKMAN, DALLAS
H. R. BRIGHT, DALLAS
TOM CALDWELL, RICHARDSON

[illegible]
MRS. [illegible] HARDEMAN, AUSTIN
MRS. ALBERT G. HILL, DALLAS
MRS. H. L. LONG, KILGORE
MRS. ARGYLE A. McALLEN, LIN
LOUIS F. TERRAZAS, SAN ANTONIO
DR. DAN A. WILLIS, FORT WORTH

TEXAS HISTORICAL COMMISSION

P.O. BOX 12276
AUSTIN, TEXAS 78711

TELEPHONE
(512) 475-3092

June 24, 1982

RECEIVED
JUN [illegible] 1982
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Mr. Clinton B. Spotts
Regional EIS Coordinator
U.S. Environmental Protection
Agency
Region VI
1201 Elm Street
Dallas, Texas 75270

Dear Mr. Spotts:

We have received and reviewed your letter and documents, dated June 7, 1982, concerning the H.W. Pirkey Power Plant and South Hallsville Lignite Mine Projects. We concur in the following determinations:

1. an adverse effect from early construction on historic properties of possible National Register value at the plant site.
2. possible adverse effects from early construction on cultural resources within the railroad spur and a portion of the make-up water pipeline.
3. a potential adverse effect for work in the mine area with development of a MOA to protect cultural resources in compliance with Section 106.

If we can be of further assistance, please let us know. We look forward to continued consultation on this project.

Sincerely,

Patience E. Patterson for
LaVerne Herrington, Ph.D.
Deputy
State Historic Preservation
Officer

PEP/LH/lft

The State Agency for Historic Preservation

PROJECT AREA	PROJECT STATUS SURVEYS	 CONSTRUCTION	[illegible]
Power Plant Site (272 acres)	literature & 100% field	clearing complete	commitment of poter [illegible] historic site
Cooling Reservoir (1388 ac.)	literature & 100% field	clearing & dam complete	
Ancillary Area (1451 ac.)	literature & 100% field	clearing complete	
Makeup water pipeline (24 mi.)	literature & field on the last 9.7 mi.	cleared & 75% built	no affect on 9.7 mi
Transmission lines (11.7 mi.)	literature only	none	
Railroad spur (3.5 mi.)	literature only	built	
Surface Lignite Mine (totals 20,771 acres) 1st 5-yr tract = 956 ac. rest of mine = 9632 ac. haul roads = 430 ac. ancillary area= 9753 ac.	literature 20% field & 80% model	none	
Highway relocation routes	literature	none	

APPENDIX D

Evaluation of the Discharge of
Dredged and Fill Material
in Accordance with Section 404(b)(I)
Guidelines, 40 CFR 230

APPENDIX A
EVALUATION OF THE DISCHARGE OF DREDGED AND FILL MATERIAL IN ACCORDANCE WITH SECTION 404(b)(1) GUIDELINES
40 CFR 230

I. RESTRICTIONS ON DISCHARGES

After completing the technical evaluation the proposed discharge will be evaluated against the restrictions specified in this section. A statement of compliance or noncompliance will be included in the Environmental Assessment.

SUBPART A ACCEPTABILITY

Dredged and fill material should not be discharged into the aquatic ecosystem unless it can be demonstrated that such a discharge will not have an unacceptable adverse impact either individually or in combination with other known and/or probable impacts of other activities affecting the ecosystem of concern.

SUBPART B RESTRICTIONS

1. (a) Will this project involve a discharge into a special aquatic site?

☐ No (See 2) ☒ Yes (See 1(b))

(b) Does the project require location within such a site to fulfill its basic purpose? Why?

☐ No (See 1(c)) ☒ Yes (See 2)

Wetlands occur within the proposed mine permit boundary . Wetlands within areas to be mined will be adversely impacted; those in the ancillary activity area have the potential of being adversely impacted, either directly as a result of the location of a mine facility (e.g., shops, haul roads, etc.) or discharges from the area to be disturbed by mining. Alternative reserves would require the loss of substantially greater wetland acreage (see Section 3.4.6 of the Draft EIS).

(c) Considering cost, technology, and logistics discuss apparent practicable alternatives to the project not involving discharges into a special aquatic site or demonstrate the lack of such alternatives. (Proceed to 3)

2. Considering cost, technology, and logistics discuss apparent practicable alternatives to the discharge which will achieve the project purpose. Only those alternatives which appear to have less impact on the environment need be discussed.

Alternatives considered in Section 3.4.6 of the Draft EIS. As discussed in Section 3.4.6, the applicant's proposal represents the least damaging practicable alternative for extraction of the necessary coal reserves.

3. Will any of the above alternatives have less adverse impact on the aquatic ecosystem or other environmental values than the applicant's proposal? Your answer should reflect a comparison of alternatives made pursuant to Subparts C-F and other environmental documentation necessary to support the answer.

☒ No *☐ Yes

4. Has the discharge been certified as being in compliance with State Water Quality Standards?

*☐ No ☒ Yes Date: ____________

5. Does the project appear to violate applicable Federal toxic effluent standards developed pursuant to Section 307 of the CWA (40 CFR 219)?

☒ No *☐ Yes

6. Will this project jeopardize the continued existence or critical habitat of species listed as threatened or endangered under the Endangered Species Act of 1973?

☒ No *☐ Yes

7. Will the project violate any requirement established by the Secretary of Commerce to protect any marine sanctuary?

☒ No *☐ Yes

8. As determined in Subpart C - G of this evaluation, will this project contribute to significant degradation of waters of the United States including adverse effects on human health, life stages of organisms dependent on the aquatic ecoystem, ecosystem diversity, productivity and stability, and recreational, aesthetic, and economic values?

☒ No *☐ Yes

9. Have appropriate and practical steps been identified in Subpart H which would minimize potential adverse impacts of the discharge on the aquatic ecosystem?

☐ No (Evaluation Complete) **☒ Yes (See 10(a))

10. (a) Will such steps be incorporated into the project design?

**☐ No ☒ Yes

(b) or will they be required by permit conditions or other agreements?

**☐ No ☐ Yes

* An answer annotated by an asterisk indicates that the discharge is not in compliance with 40 CFR 230.

** An answer annotated by a double asterisk indicates that the proposed discharge is not in compliance with 40 CFR 230 when marked in three consecutive places

II. ANALYSIS OF PROJECT IMPACTS ON THE AQUATIC ECOSYSTEM

Subparts C-F of this section should provide a technical analysis of project impacts on the aquatic ecosystem. Discuss any appreciable changes to the specified portion of the aquatic ecosystem which would result from the applicant's proposal and any design features of the proposal which would minimize adverse affects. Compare such impacts with those of any practicable alternatives.

SUBPART C - PHYSICAL AND CHEMICAL IMPACTS

Your discussion should include any pertinent information about primary, secondary, or cumulative impacts of the work on the substrate (S. 230.20); turbidity/suspended particulates (S. 230.21); physical and chemical changes to the water column (S.230.22 current, circulation, or fluctuation (S. 230.23 - .24); and salinity gradients (S.230.25).

SEE ATTACHMENT "A"

See Draft EIS Sections: 4.2.2.3 (p. 4-39 through 4-41);
4.2.2.4 (p. 4-42, 43, 46-48, 52-55
4.3.4.1 (p. 4-75);
4.5.1.3 (p. 4-110); and
4.5.1.4 (p. 4-115, 116)

for more detailed discussions of physical and chemical impacts to wetlands (bottomlands, marshes, and bogs) along portions of the Sabine River, Clark Creek, and Hatley Creek floodplains in the mine area; and Big Cypress and Little Cypress bayous in the makeup water pipeline corridor. Cumulative impacts are discussed in Section 4.9, specifically pages 4-214.

SUBPART D - BIOLOGICAL IMPACTS

Your discussion should include pertinent information about primary, secondary, and cumulative impacts of the work on threatened and endangered species (S 230.30); aquatic organisms (S. 230.31); and wildlife (S. 230.32).

SEE ATTACHMENT "B"

SUBPART E - IMPACTS ON SPECIAL AQUATIC SITES

Discuss any change to special aquatic sites (S 230.40 - 230.45) resulting from the applicant's proposal. The discussion should include pertinent information about primary, secondary, and cumulative impacts of the work on values associated with each special aquatic area.

SEE ATTACHMENT "C"

SUBPART F - IMPACTS ON HUMAN USE CHARACTERISTICS

The discussion should include pertinent information about primary, secondary, and cumulative impacts of the work on municipal and private water supplies (S 230.50); recreational and commercial fisheries (S 230.51); water related recreation (S 230.52); aesthetics (S 230.53); and designated parks and preserves (S 230.54).

No municipal water supplier will be affected; private wells within 3000 ft. of the mined area may be affected by dewatering (see Sections 4.2.1.3 and 4.2.1.4 of the Draft EIS), and by increased levels of sulfate allowed in Harrison Co. and the cooling reservoir associated with the power plant will be open for recreational fishing (sport fishing is presently limited in the project vicinity) (Section 4.5.3); water-related recreation will benefit (Section 4.7.3.6); aesthetics will be minimally affected due to light population and traffic concentrations (Section 4.7.3.7); see Sections 4.7.1.7, 4.7.3.6, and 4.7.4.6, for a discussion of recreational facilities. Cumulative impacts are discussed in Section 4.9.

SUBPART G - EVALUATION AND TESTING

1. Describe the source and type of dredged or fill material including land use patterns, potential sources of municipal or industrial pollutants and route of such contaminants to extraction site, significant introduction of persistent pesticides, and possible sources of natural materials which might produce harmful effects on the aquatic environment as a result of man induced discharge activities. (For open water disposal projects include a discussion of site characteristics found in 40 CFR 230.11 (f)). List sources from which this information was derived including drainage maps, pollutant discharge or spill records, previous testing, personal communication, etc.

Detailed descriptions of the soils and overburden from the mine are given in Section 3.5.2.3 (pp. 3-106 through 3-112) of the Draft EIS. Overburden is devoid of concentrations of heavy metals that would be considered toxic (p. 4-14). Solid waste generated from the power plant will not be placed in wetland areas; municipal pollutants and pesticides are not applicable to this project. Sedimentation loading is a possible source of natural material that will impact aquatic/wetland habitats.

2. Based on the above discussion is the extraction site sufficiently removed from sources of pollution to provide reasonable assurance that the proposed discharge material is not a carrier of contaminants?

☐ No (See 3) ☒ Yes (Proceed to 6)

3. (a) Is the discharge material composed predominantly of sand, gravel, or other naturally occurring inert material?

☐ No (See 4) ☒ Yes (See 3b)

(b) Are there any indications of contamination such as discoloration, odor, prevalence of dead vegetation, or other physical appearance?

☒ No (Proceed to 6) ☐ Yes (Proceed to 5)

4. (a) Is the discharge site adjacent to the extraction site and subject to the same sources of contaminants?

☐ No (See 5) ☐ Yes (See 4b)

(b) Is the material at the two sites substantially similar?

☐ No (See 5) ☐ Yes (See 4c)

(c) Can the dissolved and suspended particulates be controlled to prevent possible contamination of other areas?

☐ No (See 7) ☐ Yes How? (See 6)

5. (a) There is a high probability that the proposed discharge material may be a carrier of contaminants. Are there any constraints available to reduce contamination to acceptable levels within the disposal site and prevent transport of contaminants beyond these boundaries?

☐ No (See 7) ☐ Yes (See 5b)

(b) Describe available constraints including their acceptability to applicant. Insure that the impacts of discharging this potentially contaminated material are adequately addressed below or in other portions of this document. (See 6)

6. Based on this evaluation there is little likelihood that discharges associated with the applicant's project or any practicable alternatives will result in contamination of the aquatic ecosystem; therefore, no testing will be required.

☐ No (See 7) ☒ Yes (Proceed to Subpart H)

7. Based on this evaluation there is reason to believe that the applicant's project or its practicable alternatives may result in degradation of water quality; therefore, the following tests were performed to analyze the discharge material and predict its impact on the aquatic ecosystem. Describe tests and results. Make statement as to acceptability of impacts.

III. SUBPART H - ACTION TO MINIMIZE ADVERSE EFFECT

Identify practicable actions which are not part of the applicant's current proposal but could be taken to minimize significant adverse effects of the proposed discharge. Discussion of the benefits to be derived from each of these actions should be related to effects specified in the appropriate Subpart of this document. Actions to be considered may include those concerning location of the discharge (S 230.70); material to be discharged (S 230.71); controlling pollution from discharge area (S 230.72); method of dispersion (S 230.73); technological innovations (S 230.74); actions affecting plant and animal populations (S 230.75); and those affecting human use of the aquatic ecosystem (S 230.76).

There have been no practicable actions identified that could be taken to minimize significant adverse effects of the proposed discharge, in addition to those the applicant currently proposes.

ATTACHMENT "A"

Physical & Chemical Impacts

Clearing activities associated with construction of the proposed project will temporarily increase overland runoff from cleared areas. Localized erosion control measures will be implemented to minimize sediment transport to receiving streams of the power plant, transportive systems, and mine site. In addition, sedimentation ponds will be constructed in areas to be disturbed by mining prior to clearing/mining.

The most significant change brought about by the operation of the power plant will be the inundation of approximately 20 percent of Brandy Branch watershed by the cooling reservoir. The contribution of this area to downstream flows will be pre-empted, except during peak runoff periods (flooding). Further, an increase in dissolved nutrient and organic material in waters of the reservoir will be brought about by leaching of these materials from inundated soils and vegetation. Turbidity will be low as compared to pre-impoundment water due to decreased suspended solids; dissolved oxygen and pH fluctuations will increase through increased biological activity; and dissolved solids will increase due to evaporation. No significant changes to downstream water chemistry during flood discharges from the impoundment will occur.

Runoff control and management measures will be implemented to levels acceptable to regulatory agencies prior to disturbance of areas to be mined. Runoff and sediment volumes resulting from rainfall events with frequencies up to 25 years and durations up to 24 hours will be positively controlled at the mining front, with the objectives of arresting flooding potential and settling sediment-laden runoff originating at either the mining front or in the general vicinity. Off-channel sediment ponds with detention times of 24 hours or greater will ensure the impoundment of storm runoff waters for sufficient time to allow settling of most suspended sediment before any releases are made. These sediment ponds will be located off the main channel; therefore, there will be little or no interference with streamflow during periods of normal flow. Analysis of "worst case" conditions (i.e., assuming all areas to be mined are in a disturbed state and no reclamation has taken place) for sediment pond discharge under a 10-year, 24-hour precipitation event demonstrated no significant increases in total suspended solids, iron, or manganese in project streams or in the Sabine River. Post-mining (post-reclamation) overland flows during peak runoff (storm events) will, however, increase by a large percent in areas previously covered by dense vegetation.

ATTACHMENT "B"

Biological Impacts

Construction of the plant site and transportive systems has adversely impacted local biological communities by the direct elimination of about 2,460 acres of primarily upland forest vegetation/wildlife habitat. During the life of the mine, approximately 10,545 acres of vegetation/wildlife habitat will be cleared. Other facilities associated with the mine will pre-empt vegetation/wildlife habitat in the 10,226 acre mine ancillary area.

Mining is expected to have both short-term and long-term effects on terrestrial wildlife. Incremental habitat modification will cause a reduction of some local wildlife populations and the migration of some fauna into adjacent areas. A discussion of the potential impacts on terrestrial wildlife populations resulting from mining and reclamation activities is presented in Section 4.5.2.3 (pp. 4-126 and 4-127) and Section 4.5.2.4 (pp. 4-129 and 4-130) of the Draft EIS.

Construction and operation of the proposed project will cause an adverse impact to some local populations of wildlife species associated with aquatic ecosystems. In order to minimize erosion and associated adverse impacts on downstream vegetation/wildlife habitat, including wetlands, a vegetative cover will be established on areas disturbed by construction as soon as feasible. A discussion of the impacts of the proposed project on hydric vegetation communities is presented in Section 4.5.1.3 and 4.5.1.4 of the Draft EIS. The alteration of bottomland forest, swamps, and marshes will cause a long-term adverse impact to local wildlife populations associated with aquatic ecosystems (see Section 4.5.2.4 of the Draft EIS). The cooling reservoir will develop shoreline vegetation and thereby provide increased habitat. Wildlife which rely on aquatic or shoreline habitats should increase in abundance in the area (see Section 4.5.2.4, p. 4-128 of the Draft EIS).

Construction and operation of the proposed project will result in the loss of some aquatic organisms by direct habitat alteration. Project activities could potentially discharge effluents to streams, adversely impacting aquatic biota. Construction of the cooling reservoir should result in a considerably more aquatic habitat than previously existed. The reservoir will be stocked with forage and sport fish and will be open to the public for recreational fishing. A discussion of the impacts of project construction and operation on aquatic organisms is presented in Sections 4.5.3.3 and 4.5.3.4 of the Draft EIS.

The possible presence of and potential impacts of the proposed project on threatened and endangered species are presented in Sections 4.5.1.1 (p. 4-99), and 4.5.2.1 (p. 4-121) of the Draft EIS, and in EPA's Biological Assessment Report (Espey, Huston & Associates, Inc., 1982, Threatened and Endangered Species, Biological Assessment, South Hallsville Project, Document No. 72105). As a result of the assessment, EPA determined there is "no effect" on the Red-cockaded Woodpecker, and a "may effect" situation exists for the American Alligator and Bald Eagle. This determination was reviewed by the U.S. Fish and Wildlife Service (FWS) in Albuquerque, N.M. The FWS concluded that the proposed projects would not affect the Red-cockaded Woodpecker or American Alligator, and is not likely to jeopardize the continued existence of the Bald Eagle (see Appendix E of the Final EIS). In other studies conducted for the rest of the project area, no species or habitat was discovered that might be utilized by the woodpecker or eagle. Potential, but limited, alligator habitat was present, but no species were observed. However, it was pointed out in the FWS biological opinion that the Red-cockaded Woodpecker may become an inhabitant in the area in the next 10 to 20 years, as the young pine trees mature into possible suitable habitat. Likewise, the Bald Eagle may use the cooling reservoir or other project ponds for feeding habitat. The American Alligator may be adversely affected when future mining occurs closer to the Sabine River floodplain and associated wetland areas.

ATTACHMENT "C"

Impacts on Special Aquatic Sites

Special aquatic sites in the project area include wetlands and limited riffle and pool complexes. All aquatic sites associated with the project have experienced perturbances brought about by past land use practices (e.g., agriculture).

Increased surface water flow and subsequent sediment transport to streams will be controlled by sediment ponds meeting various permitting agencies' effluent limitations. If any sediment loading to project streams occurs during either construction or operation activities, it will be short-term and no significant changes to aquatic communities are anticipated. Both stream and wetland communities of the project area are well-adapted to withstand or rapidly recover from periodic siltation which presently occurs during rainfall events.

Riparian vegetation and intermittent stream habitat contained within the cooling reservoir site (1,388 acres; 20 percent of Brandy Branch watershed) will be pre-empted. The impoundment will provide more aquatic habitat than previously existed.

Existing wetland communities contained within areas to be disturbed by mining will be pre-empted. Major streams within the mine site will not be directly affected by mining; however, construction of stream crossings will alter aquatic communities where they occur. Intermittent tributaries to major project streams and wetlands contained in areas to be disturbed by mining will be pre-empted; aquatic sites lateral to these activities have the potential of undergoing changes as a result of mine site dewatering/discharges.

See Subparts C and D, and Draft EIS Sections 4.5.3.3 (pp. 4-136 through 138) and 4.5.3.4 (pp. 140, 141, and 142).

APPENDIX E

FWS Opinion on Section 7

Biological Assessment

IN REPLY REFER TO:

UNITED STATES
DEPARTMENT OF THE INTERIOR
FISH AND WILDLIFE SERVICE

SE

POST OFFICE BOX 1306
ALBUQUERQUE, NEW MEXICO 87103

June 29, 1982

2-1-82-F-215

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Mr. Clinton B. Spotts
Regional EIS Coordinator
Environmental Protection Agency
1201 Elm Street
Dallas, Texas 75270

Dear Mr. Spotts:

This is in response to your request of May 18, 1982, for formal Section 7 consultation, as provided by the Endangered Species Act. This consultation is on the Environmental Protection Agency's (EPA) issuance of the National Pollutant Discharge Elimination System (NPDES) and Prevention of Significant Deterioration (PSD) permits and the Corps of Engineers' Section 404 permit(s) for the construction and operation of the Pirkey powerplant and the first 5 years of lignite mining at the Hallsville surface mine. The powerplant and lignite mine projects occur in Harrison County, Texas.

The following background information and biological opinion are founded upon review of information furnished by EPA, data in our files, and discussions with various people on the impacts of the proposed action upon endangered species.

Background Information

On August 21, 1981, the EPA requested a list of federally endangered and threatened species that may be affected by the powerplant and lignite mine. On September 3, 1981, we furnished a species list that included the red-cockaded woodpecker (Picoides borealis), bald eagle (Haliaeetus leucocephalus) and American alligator (Alligator mississippiensis).

The Federal actions under consultation concern the issuance of permits that affect the quality of air and water resources at, and adjacent to, the powerplant and lignite mine. Construction of the powerplant began in the spring of 1979, partly as a result of EPA's issuing a PSD permit. As of May 1982, approximately 3,260 acres of land, on and off the powerplant site, have been cleared and the railroad spur is operational.

Major onsite project components include the powerplant, cooling reservoir, water pipeline, railroad, transmission lines, and the first 5-year mine tract, which minimally includes the actual mine area, sedimentation ponds, and coal haul roads. Approximately 25,000 acres of land will be modified and/or cleared during the first 5-year mining period.

Major offsite project elements include three 138 kV transmission lines and the approximately 25-mile long, 36-inch pipeline used to transport water from Big Cypress Bayou to the powerplant.

In addition to the effects of land clearing, incremental removal of overburden in the various mine blocks, reclamation of mine areas, and removal of water from one river system, the powerplant will increase the local concentration of certain air pollutants. Existing data indicates the SO_2 concentrations will be far less than the amount needed to injure vegetation. Also, predicted NO_x concentrations are expected to be negligible.

The endangered red-cockaded woodpecker is a historical inhabitant of Harrison County. Data indicate the habitat on the project area is not suitable for this species, largely because of the preponderance of hardwood forest and the lack of old (50-year plus) pine trees. The data also indicate this species will not be affected by the actions under consultation. However, we recognize this species may become an inhabitant in the area as the young pine trees mature in the next 10 to 20 years.

The alligator is judged not to occur in the current powerplant and mining action area because of upland locations of the sites. We do not believe the removal of 18,000 acre-feet of water per year from the Big Cypress Bayou will affect this species. When future mining occurs in the bottomlands and is thus closer to the Sabine River floodplain, this species may be affected.

The bald eagle has not been recorded in Harrison County, though mid-winter counts during the past several years indicate this species occurs in adjoining Gregg and Rusk Counties. There is a remote possibility this wide-ranging species may use some of the project ponds for hunting. Of the ponds we know of, the approximately 1,400 acre cooling reservoir is the one most likely to be used. Eagles using the ponds would likely represent individuals that have changed their habitat use pattern in contrast to constituting an addition to the Texas bald eagle population. There is also a possibility the transmission lines will be used by bald eagles for perching. The birds may be electrocuted, unless these lines are designed to prevent electrocution.

Biological Opinion

Based upon this evaluation, it is my biological opinion that issuance of the NPDES, PSD, and associated 404 permits for the construction and operation of the powerplant and the first 5-year lignite mining is not likely to jeopardize the continued existence of the bald eagle.

To eliminate the possibility of electrocuting bald eagles by the transmission lines, I would recommend these lines be constructed according to the publication, "Suggested Practices for Raptor Protection on Power Lines - The State of the Art in 1981," by the Edison Electric Institute and distributed by the Raptor Research Foundation, Department of Veterinary Biology, University of Minnesota, St. Paul, Minnesota 55101.

Further consultation is not required unless new information becomes available that addresses the welfare of the involved endangered or threatened species, or the actions are so modified they will affect these species in a manner not addressed in this opinion, or a new species is listed that may be affected by the actions.

Sincerely yours,

Acting Regional Director

cc: Director, FWS, Washington, D.C. (OES)
Area Manager, Area Office, Austin, TX
Field Supervisor, Ecological Services, Fort Worth, TX
Executive Director, Texas Parks and Wildlife Department, Austin, TX
Attn: Nongame Program Director

APPENDIX F

SMC/Harrison County Soil and Water Conservation District Agreement

F-1

BOX CC MARSHALL, TEXAS 75670

FARMER–DISTRICT COOPERATIVE AGREEMENT

This agreement is entered into by the Harrison County Soil and Water Conservation District, referred to hereinafter as the "District", and

The Sabine Mining Company, Dallas, Texas 75240

13140 Coit Road, Suite 400, (214) 669-3001

referred to hereinafter as the "Farmer",

THE DISTRICT AGREES TO:

Assist in carrying out a conservation plan by furnishing to the Farmer such (1) information, (2) technical assistance and supervision, and (3) other assistance as it may have available at the time the work is to be done.

THE FARMER AGREES TO:

1. Use his land within its capabilities.
2. Treat his land in keeping with its needs.
3. Develop as rapidly as feasible a conservation plan for his entire farm.
4. Start applying one or more conservation practices in keeping with these objectives and the technical standards of the District.
5. Maintain all structures established in an effective condition, and to continue the use of all other conservation measures put into effect.
6. Use any materials or equipment made available to him by the District for the purpose and in the manner provided for it.

IT IS FURTHER AGREED THAT:

1. This agreement will become effective on the date of the last signature and may be ~~terminated or~~ modified by mutual agreement of parties hereto or terminated by either party upon thirty (30) days written notice to the other.
2. The provisions of this agreement are understood by the Farmer and the District and neither shall be liable for damage to the other's property resulting from carrying out this agreement unless such damage is caused by negligence or misconduct.

WITNESS THE FOLLOWING SIGNATURES:

Clifford R. Miercort .... The Sabine Mining Company
Clifford R. Miercort, President (Operator)

Margaret H. Cain .... 8/18/82 ....
(Witness) (Date) ~~(Owner)~~

HARRISON COUNTY SOIL AND WATER CONSERVATION DISTRICT

By ....
(Director)

Date 8-20-82

CONSERVATION - DEVELOPMENT - SELF-GOVERNMENT

F-1a

APPENDIX G

SWEPCO/State Department of Public Highways and Transportation Agreement

Harrison County
Proposed
Farm to Market Road

AGREEMENT BETWEEN THE SOUTHWESTERN ELECTRIC POWER COMPANY AND THE STATE OF TEXAS AND HARRISON COUNTY, TEXAS

THIS AGREEMENT, made this 20th day of January, 1981, by and between the State of Texas, acting by and through the Engineer-Director of the State Department of Highways and Public Transportation, hereinafter called the "State", Party of the First Part, Harrison County, Texas, hereinafter called the "County", Party of the Second Part, acting by and through the officers of the Harrison County Commissioner's Court, and the Southwestern Electric Power Company, hereinafter called the "Company", Party of the Third Part, acting by and through its Vice President, hereunto duly authorized.

WITNESSETH

WHEREAS, a delegation consisting of officers of the Harrison County Commissioner's Court and Southwestern Electric Power Company appeared before the Texas State Commission of Highways and Public Transportation on September 26, 1979; and

WHEREAS, Commission Minute Order Number 76519 dated November 19, 1979, was tendered to Harrison County and Southwestern Electric Power Company pertaining to the construction of a Farm to Market Road from IH-20, 3.5 miles west of State Highway 43, south, west and northwest to FM Road 968; and

WHEREAS, the officials of Harrison County and Southwestern Electric Power Company accepted the terms and conditions of Minute Order Number 76519, labeled Exhibit "A", attached hereto and made a part hereof; and

WHEREAS, the Company desires to mine the area now occupied by a local road system maintained by the County; and

WHEREAS, it is deemed to be the public's interest that a road be constructed around the perimeter of the mine area.

AGREEMENT

NOW, THEREFORE, the parties hereto do mutually agree as follows:

ARTICLE 1. For and in consideration of one dollar ($1.00) paid to the State by the County and Company, receipt of which is hereby acknowledged, the State agrees to accept, upon its completion, into its system for maintenance a Farm to Market Road hereinafter called the "Road", from Interstate Highway 20, 3.5 miles west of State Highway 43, south, west and northwest to Farm to Market Road 968 approximately as shown on Exhibit "B", attached hereto and made a part hereof.

ARTICLE 2. The Company will prepare location maps for review and approval of the location by the State.

ARTICLE 3. Upon approval of the location by the State, the Company will prepare preliminary designs for the roadway and structures as a basis for the preparation of a right-of-way map, prepare descriptions of property to be acquired, and submit the preliminary designs, property descriptions, and right-of-way map to the State for review and approval.

ARTICLE 4. Upon approval of the right-of-way map and property descriptions by the State, the Company and the County shall proceed to acquire all necessary right-of-way and drainage easements, provide for utility adjustments and relocations in accordance with appropriate State and Federal regulations and policies, and should the relocation of persons or businesses be required, conform with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, and the Civil Rights Act of 1964 at the Company's sole expense. The Company shall provide or arrange for adjoining property owners' fences. These fences will not be constructed on the highway right-of-way.

ARTICLE 5. The Company shall prepare detailed construction drawings and specifications for the Road, including incidental work as required. The Plans and specifications shall be in accordance with the State's usual design standards and specifications for Farm to Market Roads. No construction work will be performed until these plans and specifications have been approved by the State and after approval has been given no changes or alterations will be made therein without the written approval of the State. Plans and specifications after having been approved in writing by the State are hereby adopted as plans and specifications covering the construction of the Road and when so approved will be marked "EXHIBIT C", attached hereto and made a part of this agreement.

ARTICLE 6. Upon approval of the plans and specifications the Company or its agent may proceed with the construction of the Road. Construction shall be carried out in accordance with plans and specifications. The Company will designate a Project Engineer who will have full responsibility and authority for the supervision of the work on the project. The Project Engineer will establish quality control schedules and procedures in accordance with the State's Construction Manual and Manual of Testing Procedures. Prior to beginning the work, a quality control plan will be submitted to the State for approval and after approval has been given, no changes or alterations will be made therein without written approval of the State. The Project Engineer shall furnish monthly progress reports and certified test reports in accordance with the approved schedule to the State as work progresses.

Should quality control, at any time during the course of the work, fall below minimum departmental standards as set forth in the Construction Manual, the State may designate an Engineer to assume supervisory control of the work. The State's Engineer will have authority to designate work to be removed and replaced, type of equipment, construction procedures, materials to be tested, test materials in the State's laboratory and otherwise establish quality controls for the project. All expense incurred from such actions will be borne by the Company.

ARTICLE 7. Upon completion of the work the State will make a final inspection of the project, and if found satisfactory, will accept the project for maintenance.

ARTICLE 8. Upon acceptance of the project by the State, the County shall furnish to the State fee simple title or easement for highway purposes for all land to be used as right-of-way for the State Highway System. Title to the right-of-way shall exclude oil, gas and sulphur which can be removed from beneath the surface of the land without any right whatever in the owners thereof for ingress or egress to or from the surface of the land for the purpose of exploring, developing, drilling or mining of same. The State will furnish the County the standard deed forms used by the State in acquiring highway right-of-way. The County shall secure and furnish to the State drainage easements over, across and upon any other lands which are needed for drainage purposes as shown on the approved right-of-way map. The County shall provide owner policies of title insurance in the name of the State for all lands to be furnished to the State. The title policies shall conform to the title requirements specified in the State's Right-of-Way Manual.

ARTICLE 9. In the construction of the roadway, the Company agrees to use reasonable care and/or require its contractor to use reasonable care to protect the traveling public. The Company agrees to indemnify and save harmless the State, except when such be due to the action or omission of the State and its employees, from any and all claims, demands, actions, or causes of action, damage to property, injury to or death of persons arising from or growing out of or in any manner connected with the construction of the road and incidental items thereto and, until final acceptance by the State, does hereby agree to indemnify the State against all court costs, attorney fees and all expenses in connection with suits for such damage and shall, if so requested in writing, assist or relieve the State from defending any such suits brought against them.

ARTICLE 10. All work in connection with the project covered under this agreement shall be accomplished at no cost to the State.

ARTICLE 11. Upon the execution of the agreement the Company will pay to the State by check made payable to the State Treasurer Account, Trust Fund Number 927, an amount of ten thousand dollars ($10,000) which is estimated to be the total of all State cost for construction, engineering, inspection, testing, supervision, and all State force account work or other charges incurred by the State in connection with the construction of the Road. During the construction, if it becomes apparent that the amount placed in escrow by the Company will not be sufficient to cover the State's cost for construction, engineering, inspection, testing, all State force account work, and other charges in connection with the project, the Company, upon request from the State, will make additional payments to the State to cover these costs.

After the work is completed and accepted by the State, the State will make a final accounting, in accordance with established accounting procedures and any funds previously deposited by the Company not expended for the cost of this project will be returned to the Company.

ARTICLE 12. Upon completion of the project the Company will furnish to the State reproducible drawings or other type copies acceptable to the State of all as-built drawings covering the right-of-way being conveyed to the State, and all work performed on the right-of-way.

ARTICLE 13. The Company shall maintain any facilities constructed by them to carry drainage from the Pirkey Power Plant cooling pond under the Road. The operation and maintenance procedures for these facilities within highway right-of-way must be acceptable to the State.

IN WITNESS WHEREOF, the parties hereto have caused these presents to be executed in triplicate and dated on the date the Engineer-Director or his assistant signs the agreement.

SOUTHWESTERN ELECTRIC POWER COMPANY

By: ______________________

(Title) Vice President

APPROVED 11/10/80
R.A.

ATTEST:

By: ______________________

(Title) SECRETARY

HARRISON COUNTY

____

Richard Anderson, County Judge of Harrison County, Texas

Doyle E. Newton

Doyle E. Newton, Commissioner
Precinct One

Perry Wood

Perry Wood, Commissioner
Precinct Two

B. C. Ferrell

B. C. Ferrell, Commissioner
Precinct Three

Z. T. Craver

Z. T. Craver, Commissioner
Precinct Four

THE STATE OF TEXAS

Certified as being executed for the purpose and effect of activating and/or carrying out the orders, established policies, or work programs heretofore approved and authorized by the State Highway and Public Transportation Commission:

By: M. H. Woode 1/20/8

Engineer-Director

Executed and approved for State Highway and Public Transportation Commission under Minute Order No. 77446, dated June 16, 1980.

RECOMMENDED FOR APPROVAL:

L. L. Jester Jr.

District Engineer

R L Lewis

Chief Engineer, Highway Design

Wayne Henneberger

Bridge Engineer

L. E. Clark

Right-of-Way Engineer 78

____

Director, Finance
RSM

HARRISON County

District No. 19

MINUTE ORDER

Page 1 of 1 Pages

WHEREAS, in HARRISON COUNTY, Southwestern Electric Power Company proposes construction of a road southwest of Marshall to serve the Henry W. Pirkey Power Plant; and

WHEREAS, the structural and geometric design standards of the proposed road are to be comparable to the Departmental standard for Farm to Market Roads; and

WHEREAS, Harrison County and Southwestern Electric Power Company have requested that the Department assume the road for maintenance upon completion of construction; and

WHEREAS, the Department has determined that this road will be a desirable addition to the Farm to Market Road System;

NOW, THEREFORE, IT IS ORDERED that a FARM TO MARKET ROAD be and is hereby designated extending from Interstate Highway 20, 3.5 miles West of State Highway 43, South, West and Northwest to Farm to Market Road 968, a distance of approximately 11.8 miles, such designation to become effective upon Departmental acceptance of the completed construction and subject to the following provisions:

1. That the location and design of the proposed road is approved by the Department prior to acquisition of right of way.
2. That the County and Southwestern Electric Power Company turn over to the Department copies of construction plans and specifications, right of way map, the completed road constructed in accordance with plans and specifications, and all associated right of way, all clear of debt and free of cost to the State.

At such time as the County and Southwestern Electric Power Company shall accept the provisions of this Order, the Engineer-Director is directed to enter into any necessary agreements for development of the project, to proceed with inspection of completed construction and to assume the road for State maintenance upon completion of construction. The Engineer-Director is further directed to proceed in the most feasible and economical manner with construction of Grading, Base and Surfacing on ramps and crossover on INTERSTATE HIGHWAY 20, 3.5 miles West of State Highway 43, at an estimated cost of $1,300,000, financing the cost in the next revision of the 20 Year Project Development and Control Plan.

This Order shall become operative upon acceptance by Harrison County and Southwestern Electric Power Company and if not accepted within 90 days of the date hereof, the action herein contained shall be automatically cancelled.

EXHIBIT "A"

Submitted by:

(Title) Program Engineer

Approved:

Commissioner

Commissioner

Commissioner

Examined and recommended by:

Director

Minute Number 76519

NOV 19 79

RECEIVED

NOV 21 79

DISTRICT 19

ATLANTA, TEXAS

☐ DIST. ENGR.
☐ ASST. D.E.
☐ DESIGN
☐ CONST.
☐ ACCT.
☐ PLANN
☐ MAINT
☐ LAB
☐ MATL.
☐ SEC.
☐ PREPARE REPLY

☐ DISTRIBUTE
☐ HANDLE
☐ SEE
☐ FILE
☐ RETURN WITH COMMENTS
☐
☐ SEND COPY TO

SIGNATURE

G-7

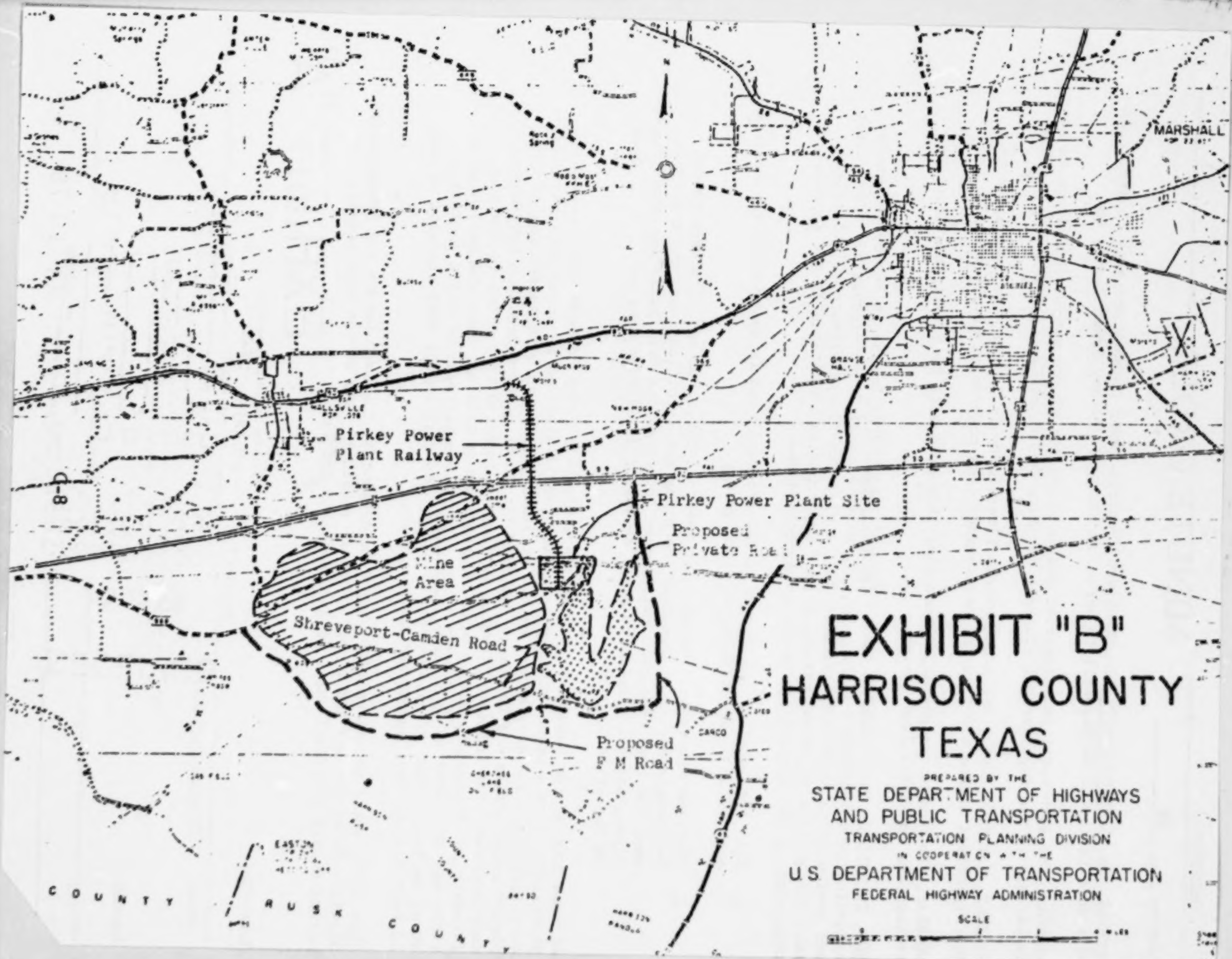


EXHIBIT "B"
HARRISON COUNTY
TEXAS
PREPARED BY THE
STATE DEPARTMENT OF HIGHWAYS
AND PUBLIC TRANSPORTATION
TRANSPORTATION PLANNING DIVISION
IN COOPERATION WITH THE
U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION
SCALE
MARSHALL
Pirkey Power
Plant Railway
Pirkey Power Plant Site
Proposed
Private Road
Mine
Area
Shreveport-Camden Road
Proposed
F M Road
CARCO
EASTON
COUNTY
RUSK
COUNTY

APPENDIX H

Railroad Commission of Texas - Notice of Surface Mining Permit Issuance

RAILROAD COMMISSION OF TEXAS
SURFACE MINING AND RECLAMATION DIVISION

JAMES E. (JIM) NUGENT, Chairman
MACK WALLACE, Commissioner
BUDDY TEMPLE, Commissioner

J. RANDEL (JERRY) HILL
Director
CHESLEY N. BLEVINS
Assistant Director

105 W. RIVERSIDE DRIVE — CAPITOL STATION — P. O. DRAWER 12967 — AUSTIN, TEXAS 78711

RECEIVED
JUL 6 1982
6 ES

NOTICE OF PERMIT ISSUANCE

RE: Sabine Mining Company	§	Permit No. 13

Pursuant to the "Texas Surface Coal Mining and Reclamation Act," the Railroad Commission of Texas on June 28, 1982, issued a permit (Permit No. 13) authorizing Sabine Mining Company to conduct a surface mining operation in Harrison County, Texas.

The surface mining operation will be known as the South Hallsville No. 1 Lignite Mine and will be located southwest of Longview, south of Hallsville and FM 968, southwest of Marshall, west of Galalee (Atlas) Church and north of the Sabine River. The permit area is approximately 4,600 acres.

Issued in Austin, Texas this 28th day of June, 1982.

J. Randel (Jerry) Hill

J. Randel (Jerry) Hill
Director
Surface Mining and Reclamation
Division
Railroad Commission of Texas

H-1a

An Equal Opportunity Employer

RAILROAD COMMISSION OF TEXAS
SURFACE MINING AND RECLAMATION DIVISION

JAMES E. (JIM) NUGENT, Chairman
MACK WALLACE, Commissioner
BUDDY TEMPLE, Commissioner

J. RANDEL (JERRY) HILL
Director
CHESLEY N. BLEVINS
Assistant Director

105 W. RIVERSIDE DRIVE
CAPITOL STATION — P. O. DRAWER 12967
AUSTIN, TEXAS 78711

NOTICE

RE: Bonding Regulations

On June 21, 1982, the Railroad Commission of Texas approved certain changes in the Surface Mining and Reclamation Division's Bonding and Insurance Regulations (Subchapter J - "Coal Mining Regulations"). The new regulations will become effective on July 12, 1982. A copy of the new regulations is enclosed for your information and review.

Issued in Austin, Texas this 28th day of June, 1982.

J. Randel (Jerry) Hill

J. Randel (Jerry) Hill
Director
Surface Mining and Reclamation
Division
Railroad Commission of Texas

Subchapters E-I--(Reserved)

Subchapter J--Bond and Insurance Requirements for Surface Coal Mining and Reclamation Operations

Part--800 General Requirements for Insurance and Bonding of Surface Coal Mining and Reclamation Operations under Regulatory Programs

051.07.04.300. Definitions.

Surety bond means an indemnity agreement in a sum certain payable to the commission executed by the permittee as principle which is supported by the performance guarantee of a corporation licensed to do business as a surety in Texas.

Collateral bond means an indemnity agreement in a sum certain deposited with the commission and executed by the permittee and supported by one or more of the following:

(1) The deposit of cash in one or more accounts, payable only to the commission upon demand after the commission has determined the need for forfeiture and has notified the permittee of forfeiture action;

(2) Negotiable bonds of the United States, a state or municipality, endorsed to the order of, and in the possession of, the commission;

(3) Negotiable certificates of deposit, made payable only to the commission in its possession;

(4) An irrevocable letter of credit of any bank authorized to transact business in the United States, payable upon demand;

(5) A perfected, first-lien security interest in real or personal property, in favor of the commission;

(6) Investment - grade related securities, having a rating of AAA, AA, A or equivalent rating, issued by a nationally recognized securities rating service, endorsed to the order of, and in the possession of, the commission.

Self-bond means an indemnity agreement in a sum certain payable to the commission, executed by the permittee and in an amount determined sufficient to assure performance of reclamation responsibilities pursuant to the permit requirements.

051.07.04.301. Requirement to File a Bond.

(a) After an application for a permit to conduct surface coal mining and reclamation operations has been approved but before such permit is issued, the applicant shall file with the commission a performance bond or bonds payable to the commission. The performance bond will be conditioned upon the faithful performance of all the requirements of the Act, this chapter, and the provisions of the reclamation plan and permit. The amount, duration, form, conditions and terms of the performance bond shall conform to Parts 805 and 806.

(b) The bond shall cover that area of land within the permit area upon which the operator will initiate and conduct surface coal mining and reclamation operations within the initial term of the permit.

(1) After the amount of the bond has been determined for the permit area in accordance with Part 805, the permittee or applicant may either file--

(A) The entire performance bond required during the term of the permit; or

(B) An incremental bond schedule and the new performance bond required for the first increment in the schedule.

(2) When the operator elects to "increment" the amount of the performance bond during the term of the permit, he shall identify the initial and successive incremental areas for bonding on the permit application map submitted for approval as provided in §.142, and shall specify the proportion of the total bond amount required for the term of the permit which will be filed prior to commencing operations on each incremental area. The scheduled amount of each performance bond increment shall be filed in the sequence approved in the permit, and shall be filed with the commission at least 30 days prior to the commencement of surface coal mining and reclamation operations in the next incremental area.

(c) Surface disturbances which are a part of underground operations, and other long-term operations may be bonded for a period of less than the permit term; however, continuous bond coverage must be maintained during active operations at those sites and for the applicable liability period after operations have ceased.

051.07.04.302. Requirement to File a Certificate of Liability Insurance.

Each applicant for a permit shall submit to the commission as part of the permit application--

(a) A certificate issued by an insurance company authorized to do business in Texas. The amount, duration, form, conditions and terms of this insurance shall conform to §.311; or,

(b) Evidence that it satisfies applicable State of Federal self-insurance requirements and that self-insurance for liability is otherwise consistent with §.311.

051.07.04.303. Commission Responsibilities.

(a) The commission shall prescribe and furnish the form for filing a performance bond.

(b) The commission shall prescribe terms and conditions for performance bonds and insurance by regulations which meet, at a minimum, the requirements of Parts 805 and 806.

(c) The commission shall determine the amount of the performance bond required for the permit area, including adjustments to the initial amount from time-to-time as land acreages in the permit area are revised, or when other relevant conditions change according to the minimum requirements of §.304(a).

(d) The commission may accept a self-bond in lieu of a surety or collateral bond if the permittee meets the requirements of §.308(b) and any additional requirements of §.308(a).

(e) The commission shall release the permittee from his bond and insurance requirements consistent with Part 807.

(f) The commission may cause all or part of a bond to be forfeited consistent with Part 808.

PART 805--Amount and Duration of Performance Bond.

051.07.04.304. Determination of Bond Amount.

(a) The amount of the bond required for each bonded area shall depend upon the reclamation requirements of the approved permit; shall reflect the probable difficulty of reclamation giving consideration to such factors as topography, geology of the site, hydrology, and revegetation potential, and shall be determined by the commission.

(b) The amount of the bond shall be sufficient to assure the completion of the reclamation plan if the work has to be performed by the commission in the event of forfeiture; and,

(c) In no case shall the bond for the entire area under one permit be less than $10,000.

(d) The amount of bond shall be based on, but not limited to, the estimated cost submitted by the permit applicant and shall be determined by the commission.

051.07.04.306. Period of Liability.

(a) Liability under the performance bond(s) shall continue until all reclamation, restoration and abatement work required of persons who conduct surface coal mining and reclamation operations under requirements of the Act, this chapter, and the provisions of the permit has been completed, and the permit terminated by release of the permittee from any further liability in accordance with Part 807.

(b) The period of liability shall continue in areas with more than 26.0 inches average annual precipitation, for not less than 5 years and in areas of 26.0 inches or less average annual precipitation for not less than 10 years.

(c) A portion of a bonded area requiring extended liability because of augmentation may be separated from the original area and bonded separately upon approval by the commission.

(d) If the commission approves a long term intensive agricultural post-mining land use, in accordance with §.399, the applicable five or ten year period of liability shall commence at the date of initial planting.

(e) The commission shall cause all or part of a bond to be forfeited consistent with Part 808. Actions of third parties which are beyond the control of the operator and for which the operator is not responsible under the permit need not be covered by the bond.

051.07.04.307. Adjustment of Amount.

(a) The amount of the performance bonds applicable to a permit may be adjusted by the commission when the cost of future reclamation work changes. The commission shall notify the permittee, surety, and any other person with a property interest in the collateral posted under this subchapter, of any proposed bond adjustment and provide the permittee an opportunity for an informal conference on the adjustment. Bond adjustments are not subject to procedures of bond release under part 807.

(b) A permittee may request reduction of the amount of performance bond upon submission of evidence to the commission proving that the permittee's method of operation or other circumstances will reduce the estimated cost to the commission to reclaim the area bonded. This reduction of bond shall be deemed a bond adjustment.

(c) In the event that an approved operations and reclamation plan is modified in accordance with subchapter G of this chapter the commission will review the bond for adequacy, and, if necessary, will adjust the bond to conform to the operations and reclamation plan as modified.

(d) The amount of the bond or deposit required and the terms of each acceptance of the applicant's bond shall be adjusted by the commission from time to time as affected land acreages are increased or decreased or where the cost of future reclamation changes.

Part 806--Form, Conditions, and Terms of Performance Bond and Liability Insurance.

051.07.04.308. Form of the Performance Bond.

(a) The form for the performance bond shall be prescribed by the Commission in accordance with this section. The commission may allow for:

(1) A surety bond;
(2) A collateral bond;
(3) An escrow account bond;
(4) Self-bonding; or
(5) Combined surety/escrow bonding.

(b) Where the mining operation is owned by two or more persons or entities, the commission shall allow each person to provide separate financial assurance provided that the total of such assurance is sufficient to accomplish reclamation.

(c) A blanket bond covering, statewide, or countywide operations may be furnished if the terms and conditions thereof are sufficient to comply with the regulations in this part and if approved by the commission.

051.07.04.309. Terms and Conditions of the Bond.

(a) The performance bond shall be in an amount determined by the commission as provided in §.304.

(b) The performance bond shall be payable to the commission.

(c) The performance bond shall be conditioned upon faithful performance of all of the requirements of the Act, this chapter, and the conditions of the permit.

(d) The duration of the bond shall be for the time period provided in §.306.

(e)(1) The bond shall provide a mechanism for a bond or surety company to give prompt notice to the commission and the permittee of any action filed alleging the insolvency or bankruptcy of the surety company or the bank or alleging any violation which would result in suspension or revocation of the surety or bank's charter or license to do business.

(2) Upon the incapacity of a bank, or surety company by reason of bankruptcy, insolvency or suspension or revocation of its charter or license, the permittee shall be deemed to be without bond coverage. The commission shall issue a notice to any operator who is without bond coverage and shall specify a reasonable period to replace bond coverage not to exceed 90 days.

(f) Surety bonds shall be subject to the following conditions:

(1) The bond shall be executed by the operator and a corporate surety licensed to do business in the state where such operation is located.

(2) Surety bonds shall be non-cancellable during their term.

(g) Letters of credit shall be subject to the following conditions:

(1) The letter may only be issued by a bank organized or authorized to do business in the U.S.--

(2) Letters of credit must be irrevocable during their terms;

(3) The letter must be payable to the commission in part or in full upon demand and receipt from the commission of a notice of forfeiture issued in accordance with Part 808.

(h) Real and personal property posted as a collateral bond shall meet the following criteria:

(1) The applicant shall grant the commission a mortgage or perfected first-lien security interest in real or personal property with a right to sell or otherwise dispose of the property in the event of forfeiture under Part 808.

(2) In order for the commission to evaluate the adequacy of the property offered to satisfy this requirement, the applicant shall submit a schedule of the real or personal property which shall be pledged to secure the obligations under the indemnity agreement. The list shall include--

(i) A description of the property;

(ii) The fair market value as determined by an appraisal conducted by an appraiser authorized by the commission;

(iii) Proof of possession and title to the real property.

(3) The property may include land which is part of the permit area; however, land pledged as security shall not be mined under any permit.

(i) Escrow bonding.

(1) The commission may authorize the operator to supplement the bond through the establishment of an escrow account deposited in one or more accounts payable on demand only to the commission or deposited with the commission directly. The total bond including the escrow amount shall not be less than the amount required under terms of performance bonds including any adjustments, less amounts released in accordance with release of performance bonds.

(2) Interest paid on an escrow account shall be retained in the escrow account and applied to the bond value of the escrow

account unless the commission has approved that the interest be paid to the operator.

(3) Certificates of deposit may be substituted for escrow accounts upon approval of the commission.

(j) Self-bonding.

(1) The commission may accept the applicant's self bond when the applicant demonstrates to the satisfaction of the commission financial solvency, existence of a suitable agent to receive service or process, and a history of financial solvency and continuous operation sufficient to assure performance of all reclamation requirements pursuant to the applicant's permit.

(2) The applicant shall be deemed to have satisfied the requirements of subsection (1) with respect to financial solvency without additional evidence thereof if the applicant meets either of the following criteria--

(i) The applicant has outstanding debt obligations all which are rated "A" (single A) or higher by either Moody's Investors Service, Inc., or Standard and Poor's Corporation and applicant's net worth is at least twice the estimated amount necessary to assure performance of reclamation; or

(ii) At the time of the consideration of the application, the applicant has--

(I) At least $10 million in net worth; or

(II) At least $20 million of tangible fixed assets in the United States;

The applicant will be deemed to have met the financial test in subsection 2(ii) by having furnished the commission with certification thereof by an independent CPA based on the applicant's most recent audited financial statement.

(3) The commission shall accept the applicant's self-bond if the obligations of the applicant thereunder are guaranteed by a third party which meets the requirements of subsections (1) or (2) above.

(4) The applicant shall submit a certified statement indicating the length of time that it has been in continuous operation and specifically stating that it has not been subjected to bankruptcy proceedings during that time.

(5) If at any time the conditions upon which the self-bond was approved no longer prevail, the operator shall so notify the commission within 10 days and alternate financial assurance shall be provided within 90 days.

(k) Combined surety/escrow bonding.

(1) The commission may accept a combined surety/escrow bonding schedule provided that--

(i) A surety bond payable to the commission is posted in the amount determined under §.304 for reclamation of each successive increment, and

(ii) An interest-bearing escrow account payable to the commission with a predetermined deposit amount and frequency is established.

(iii) The amount of the surety bond shall always be sufficient to cover the difference between the escrow balance and the total reclamation cost;

(iv) The terms and conditions of the escrow account shall be developed jointly by the operator, surety and commission. Deposits to the escrow account by the operator shall be made periodically and so reported to the commission. Failure to make deposits on schedule shall be just cause for action by the commission.

(v) A certified escrow account balance statement shall be provided periodically to the surety and the commission.

051.07.04.310. Replacement of Bonds.

(a) The commission may allow permittees to replace existing bonds with other bonds, if the liability which has accrued against the permittee on the permit area is transferred to such replacement bonds.

(b) The commission shall not release existing performance bonds until the permittee has submitted and the commission has approved acceptable replacement performance bonds. A replacement of performance bonds pursuant to this Section shall not constitute a release of bond under Part 807.

051.07.04.311. Terms and Conditions for Liability Insurance.

(a) The commission shall require the applicant to submit at the time of permit application, a certificate certifying that the applicant has a public liability insurance policy in force for the surface coal mining and reclamation operation for which the permit is sought. The certificate shall provide for personal injury and property damage protection in an amount adequate to compensate all persons injured or property damaged as a result of surface coal mining and reclamation operations, including use of explosives and damage to water wells, and entitled to compensation under the applicable provisions of State law. Minimum insurance coverage for bodily injury shall be $500,000 for each occurrence and $1,500,000 aggregate; and minimum insurance coverage for property damage shall be $500,000 for each occurrence and $1,000,000 aggregate.

(b) The policy shall be maintained in full force during the life of the permit or any renewal thereof, including completion of all reclamation operations under this Chapter.

(c) The policy shall include a rider requiring that the insuror notify the commission whenever substantive changes are made in the policy, including any termination or failure to renew.

(d) The commission may accept from the applicant, in lieu of a certificate for a public liability insuranc policy, satisfactory evidence from the applicant that it satisfies Texas self-insurance requirements and the requirements of this Section.

Part 807--Procedures, Criteria, and Schedule for Release of Performance Bond.

051.07.04.312. Procedure for Seeking Release of Performance Bond.

(a) The permittee may file a request with the commission for the release of all or part of a performance bond or deposit. Within thirty days after any application for bond or deposit release has been filed with the commission, the operator shall submit a copy of an advertisement placed at least once a week for four successive weeks in a newspaper of general circulation in the locality of the surface coal mining operation. Such advertisement shall be considered part of any bond release application and shall contain a notification of the precise location of the land affected, the number of acres, the permit and date approved, the amount of the bond filed and the portion sought to be released, and the type and appropriate dates reclamation work was performed, and a description of the results achieved as they relate to the operator's approved reclamation plan. In addition as part of any bond release application, the applicant shall submit copies of letters which he has sent to adjoining properties owners, local governmental bodies, planning agencies, and sewage and water treatment authorities, or water companies in the locality in which the surface coal mining and reclamation activities took place, notifying them of his intention to seek release from the bond.

(b) Upon receipt of the notification and request, the commission shall within thirty days conduct an inspection and evaluation of the reclamation work involved. Such evaluation shall consider, among other things, the degree of difficulty to complete any remaining reclamation, whether pollution of surface and subsurface water is occurring, the probability of continuance of future occurence of such pollution, and the estimated cost of abating such pollution. The commission shall notifiy the permittee in writing of its decision to release or not to release all or part of the performance bond or deposit within sixty days from the filing of the request, if no public hearing is held pursuant to §.313.(c), and if there has been a public hearing pursuant to §.313(d), within thirty days thereafter.

051.07.04.313. Criteria and Schedule for Release of Performance Bond.

(a) The commission may release in whole or in part said bond or deposit if the commission is satisfied that the reclamation covered by the bond or deposit or portion thereof has been accomplished as required by this act according to the following schedule:

(1) When the operator completes the backfilling, regrading, and drainage control of a bonded area in accordance with his approved reclamation plan, the release of 60 per centum of the bond or collaeral for the applicable permit.

(2) After revegetation has been established on the regraded mined lands in accordance with the approved reclamation plan, the commission may release up to 25 per centum of the original bond amount. When determining the amount of bond to be released after successful revegetation has been established, the commission shall retain that amount of bond for the revegetated area which would be sufficient for a third party to cover the cost of reestablishing revegetation and for the period specified for operator responsibility in section 23 of the act for reestablishing revegetation. No part of the bond or deposit shall be released under this paragraph so long as the lands to which the release would be applicable are contributing suspended solids to streamflow or runoff outside the permit area in excess of the requirements set by section (23(B)(10) of the act or until soil productivity for prime farm lands has returned to the equivalent levels of yield as nonmined land of the same soil type in the surrounding area as determined from the soil survey performed pursuant to section 14(A)(14) of the act, the portion of bond may be released under this paragraph so long as provision for sound further maintenance by the operator or the landowner have been made with the regulatory authority.

(3) When the operator has completed successully all surface coal mining and reclamation activities, the release of the remaining portion of the bond, but not before the expiration of the period specified for operator responsibility in section 23 of the act; provided, however, that no bond shall be fully released until all reclamation requirements of the act and the permit are fully met.

(b) If the commission disapproves the application for release of the bond or portion thereof, the commission shall notify the permittee, in writing, stating the reasons for disapproval and recommending corrective action necessary to secure said release and allowing opportunity for a public hearing.

(c) When any application for total or partial bond release is filed with the commission, the commission shall notify the municipality in which a surface coal mining operation is located by certified mail at least thirty days prior to the release of all or a portion of the bond.

(d) Any person with a valid legal interest which might be adversely affected by release of the bond or the responsible officer or head of any federal, state, or local governmental agency which has jurisdiction by law or special expertise with respect to any environmental, social, or economic impact involved in the operation or is authorized to develop and enforce environmental standards with respect to such operations shall, have the right to file written objection to the proposed release from bond to the commission within thirty days after the last publication of the above notice. If written objections are filed, and a hearing requested, the commission shall inform all the interested parties of the time and place of the hearing, and hold a public hearing in the locality of the surface coal mining operation proposed for bond release within thirty days of the request for such hearing. The date, time, and location of such public hearings shall be advertised by the commission in a newspaper of general circulation in the locality for two consecutive weeks, and shall hold a public hearing in the locality of the surface coal mining operation proposed for bond release or at the state capital at the option of the objector, within thirty days of the request for such hearing.

(e) Without prejudice to the rights of the objectors, the applicant, or the responsibilities of the commission pursuant to this section, the commission may establish an informal conference to resolve such written objections.

(f) For the purpose of such hearings the commission shall have the authority to administer oaths, subpoena witnesses, or written or printed materials, compel the attendance of witnesses, or production of the materials and take evidence including but not limited to inspections of the land affected and other surface coal mining operations carried on by the applicant in the general vicinity. A verbatim record of each public hearing shall be made, and a transcript made available on the motion of any party or by order of the commission.

Part 808--Performance Bond Forfeitures Criteria and Procedures

051.07.04.314. Forfeiture of Bonds.

(a) The commission may forfeit all or part of a bond for any permit area or an increment of a permit area if reclamation operations are not conducted in accordance with the reclamation plan or the operator defaults on the conditions under which the bond was posted.

(b) The commission may withhold forfeiture if the permittee and surety, if any, agree to a compliance schedule to comply with the violations of the permit or bond conditions.

(c) The commission may allow the surety to complete the reclamation plan if the surety can demonstrate the ability to complete the reclamation plan, including achievement of the capability to support the alternative post-mining land use approved by the regulatory authority. No bond shall be released, except for partial releases authorized under §.313, until successful completion of all reclamation under the terms of the permit, including applicable liability periods of §.306.

(d) In the event forfeiture of the bond is required by this section, the regulatory authority shall--

(1) Send written notification by certified mail, return receipt requested, to the permittee and the surety on the bond, if any, of the commission's determination to forfeit all or part of the bond and reasons for the forfeiture, including a finding of the amount to be forfeited;

(2) Advise the permittee and surety, if applicable, of any rights of appeal that may be available from the determination under state law, and

(3) Proceed in an action for collection on the bond as provided by applicable laws for the collection of defaulted bonds or other debts, consistent with this section, for the amount forfeited, if an appeal is not filed within a time established by the commission and a stay of collection issued by the hearing authority or such appeal is unsuccessful, and

(4) If an appeal is filed, defend the action.

(e) The written determination to forfeit all or part of the bond, including the reasons for forfeiture and the amount to be forfeited, shall be a final decision by the commission.

(f) Upon default, the commission may forfeit any and all bonds deposited to complete those reclamation operations for which the bonds were posted.

(g) The commission shall utilize funds collected from bond forfeiture to complete the reclamation plan on the permit area on which bond coverage applies and to cover associated administrative expenses.

051.07.04.317. Determination of Forfeiture Amount.

The commission shall forfeit the amount of the bond for which liability is outstanding and deposit the proceeds thereof in an interest bearing escrow account for use in the payment of all costs and administrative expenses associated with the conduct of reclamation activities by the commission. Funds forfeited, including interest accrued, not used to contract for completion of reclamation work, as indicated in this paragraph, shall be returned by the commission after reclamation operations have been completed.

APPENDIX I

SWEPCO Request for Commencement of Limited Construction at the South Hallsville Lignite Mine; EPA Approval Letter

TEXAS · ARKANSAS · LOUISIANA

Southwestern Electric Power Company
P. O. BOX 21106 · SHREVEPORT, LOUISIANA 71156

July 26, 1982

RECEIVED
JUL 29 1982
6 ES

Mr. Dick Whittington, P. E.
Regional Administrator
Environmental Protection Agency
First International Building   Region VI
1201 Elm Street
Dallas, Texas 75270

Attn: Mr. Clinton B. Spotts

RE: Commencement of Limited Construction
South Hallsville Lignite Mine

Dear Mr. Whittington:

Southwestern Electric Power Company (SWEPCO) is developing a surface lignite mine, the South Hallsville Mine, in Harrison County, Texas. SWEPCO has employed a mining contractor, The Sabine Mining Company (Sabine), a subsidary of North American Coal Company, to perform the actual mining operations at the South Hallsville Mine. The mine will provide fuel for an adjacent lignite-fired electric generating station, the H. W. Pirkey Power Plant, which is scheduled to commence operation in the spring of 1985. To be able to provide fuel to the power plant in time for it to begin operation as scheduled, it is necessary to commence construction on certain portions of the mine project in the summer of 1982.

On July 10, 1981, a Memorandum of Understanding Between the United States Environmental Protection Agency (EPA) and Southwestern Electric Power Company for a Third Party Environmental Impact Statement (EIS) was signed and a Notice of Intent to Prepare an Environmental Impact Statement was issued for the combined mine/power plant project. The EIS was to be prepared as required by the National Environmental Policy Act of 1969 (NEPA) prior to the decision by EPA on the New Source National Pollutant Discharge Elimination System (NPDES) permits for wastewater discharges from the proposed H. W. Pirkey Power Plant and the South Hallsville Mine Project. In the Notice of Intent for this EIS, the estimated date for the Record of Decision regarding the NPDES permits for both the mine and the power plant was given as March, 1982.

SWEPCO and Sabine are aware of the requirement to obtain an NPDES permit from EPA for the discharge of wastewaters from the proposed surface lignite mine. SWEPCO and Sabine are also aware of the provisions of NEPA which require an assessment of the environmental impact of the proposed project, since a federal action (NPDES permit issuance) is involved. Finally, SWEPCO and Sabine are aware of the provisions contained in 40 CFR 122.66(c)(4)(i) of the consolidated NPDES permit regulations which state that "No on-site construction of a new source for which an EIS is required shall commence before final agency action in issuing a final permit incorporating appropriate EIS related requirements..., unless such construction is determined by the Regional Administrator not to cause significant or irreversible adverse environmental impact."

Construction on the initial stages of the mining project was originally scheduled to commence after completion of the EIS for the project and EPA's Record of Decision regarding issuance of the NPDES permit for the surface mine, i.e., March, 1982. An NPDES permit application for the mine operations was submitted in 1981 and a draft NPDES permit has been completed by EPA. However, at the April 27, 1982 public hearing on the draft EIS for the project, EPA's revised schedule for completion of the EIS indicated that the Record of Decision had been rescheduled for August, 1982, a delay of 5 months from the originally scheduled date for this event. Consequently, initial construction for the mine project was delayed until August, 1982.

In June, 1982 SWEPCO was advised by EPA that completion of the EIS and issuance of a Record of Decision for the NPDES permit for the mine facility would not take place until approximately October 1, 1982. This latest schedule for issuance of the NPDES permit for the South Hallsville Mine would mean that construction could not commence until after October 1, if there are no further delays in issuance of the Record of Decision. SWEPCO has been advised by Sabine Mining Company that a delay until October for commencement for construction at the mine could result in a delay for the mine project such that delivery of lignite to the power plant may not be possible in time to enable the power plant to begin operation upon completion in early 1985. Sabine has further advised that it must begin construction on the dragline erection site area during the summer of 1982 in order for the mine project to remain on schedule.

Consequently, SWEPCO is hereby requesting permission from the Regional Administrator for Sabine Mining Company to commence construction on its dragline erection site by August 16, 1982, in accordance with the variance procedure contained in 40 CFR 122.66(c)(4)(i). Other mine construction activities are scheduled for 1982 as well, but these are not scheduled to take place until after October 1, the current date set for the Record of Decision. Commencement of construction on the dragline erection site simply cannot wait until that date if the project construction and operation schedules are to be met.

SWEPCO believes that this request for commencement of construction on the dragline erection site area is a valid request because it is not believed that this proposed limited construction activity will cause any significant or irreversible adverse environmental impact. SWEPCO also believes that the Regional Administrator has the information available to make a determination to this effect. Numerous documents containing environmental baseline information for the dragline erection site area, as well as the remainder of the project, are available at the EPA Region VI Offices in Dallas. The draft EIS for the project has been available as of March 26, 1982. A public hearing on the draft EIS for the project was held on April 27, 1982, with virtually no comments received.

The proposed construction activity would take place on an approximately 30-acre area, as indicated on Attachment 1, Location of Dragline Erection Area. The proposed construction activity would include preparation of two graded areas for the erection of the dragline, an access road, parking areas for equipment and vehicles and sufficient utilities to support the intended use. As indicated on Attachment 2, South Hallsville Vegetation Map, the proposed dragline erection site is located in an area of native and improved grasslands and croplands. The land is actually used as improved grassland at this time. There are no wetlands or other sensitive ecological habitats located within the dragline erection area.

A cultural resources survey of the proposed dragline erection area has been completed by a qualified archaeologist and a report of the results of that survey has been submitted to the Texas Historical Commission. No significant cultural resources sites were encountered during the survey and no further testing has been recommended. Therefore, we do not believe there will be any adverse impact to cultural resources from this proposed activity.

The site construction activities would result in some slight increased erosion from the effected area during rainfall events; however, this would be minimized by standard erosion control practices. SWEPCO believes this environmental impact would be insignificant, especially in view of the importance of initiating this very limited construction activity to enable this overall energy-providing project to remain on schedule.

In that this limited site construction activity would be undertaken prior to issuance of the NPDES permit for this facility, SWEPCO and Sabine would agree to the condition of approval of this request that, should the NEPA review process result in a determination that projected

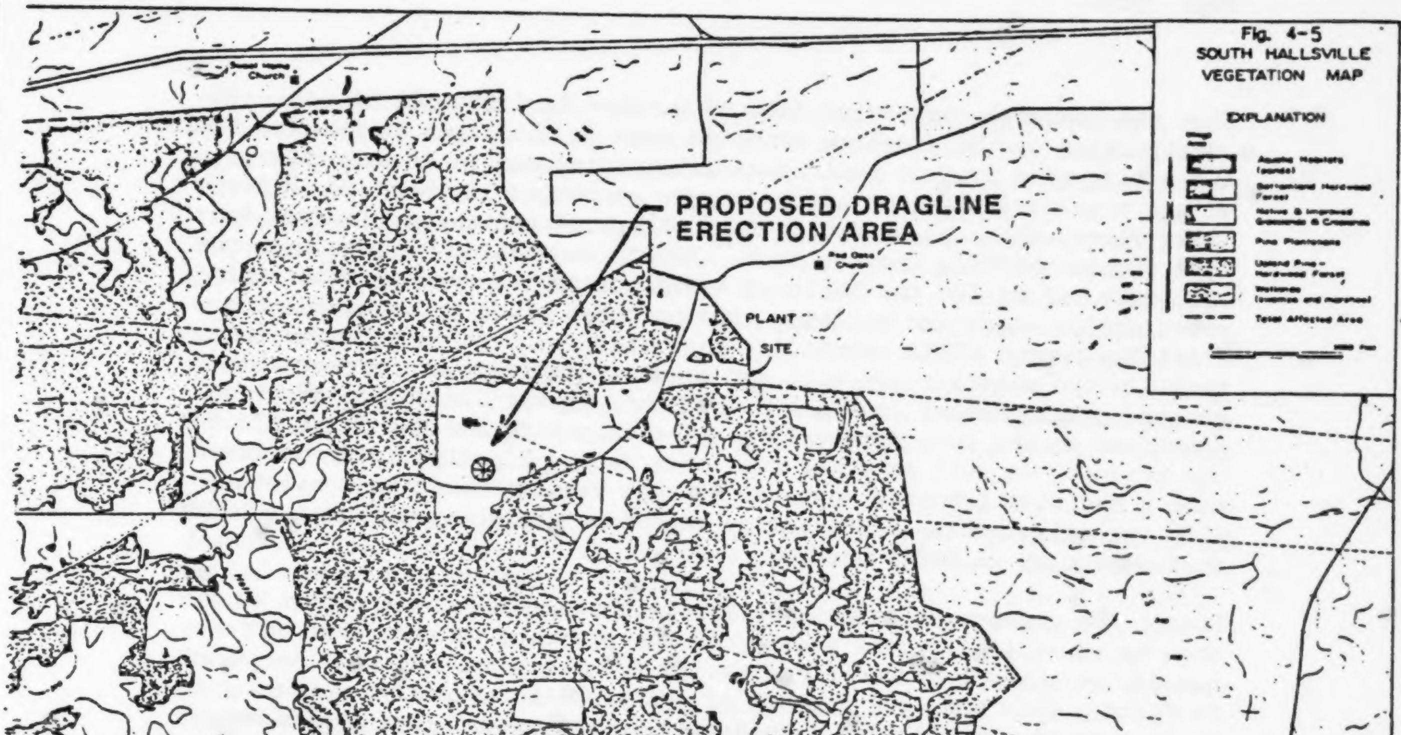
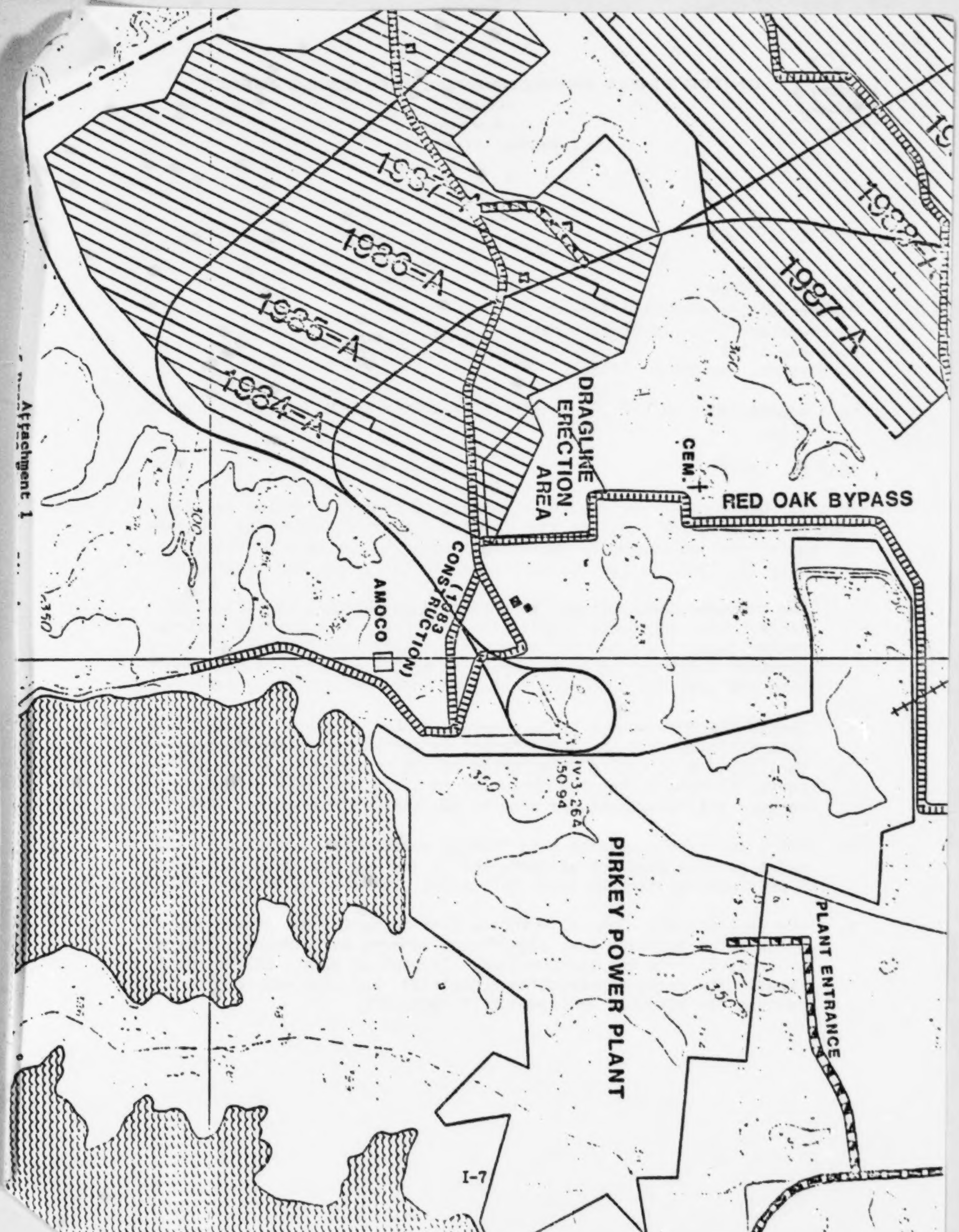


Fig. 4-5
SOUTH HALLSVILLE
VEGETATION MAP
EXPLANATION
Aquatic Habitats (ponds)
Bottomland Hardwood Forest
Native & Improved Grasslands & Croplands
Pine Plantations
Upland Pine-Hardwood Forest
Wetlands (swamps and marshes)
Total Affected Area
PROPOSED DRAGLINE ERECTION AREA
PLANT SITE
COOLING POND
DARCO

Attachment 2
South Hallsville Vegetation Map
South Hallsville Project

Attachment 1


1987-A
1986-A
1985-A
1984-A
1988-A
1987-A
19
DRAGLINE ERECTION AREA
CEM.
RED OAK BYPASS
(1983 CONSTRUCTION)
AMOCO
PIRKEY POWER PLANT
PLANT ENTRANCE
300
350
IV-3-264
150 94

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION VI
1201 ELM STREET
DALLAS, TEXAS 75270

August 18, 1982

Mr. Jay A. Pruett
Manager of Environmental Affairs
Southwestern Electric Power Company
P.O. Box 21106
Shreveport, Louisiana 71156

Re: Commencement of Limited Construction at the South Hallsville Lignite Mine.

Dear Mr. Pruett:

We have received and reviewed your request to commence limited construction on the dragline erection site for the subject lignite mine. Based on the information currently available, including the data provided in your July 26, 1982, letter, we have made the following determinations:

1. The proposed construction, as presented in SWEPCO's July 26, 1982, letter, will not cause significant or irreversible adverse environmental impact, and the Sabine Mining Company (SABINE) may therefore commence construction on its dragline erection site in accordance with the variance procedure contained in 40 CFR 122.66(c)(4)(i).

2. Should the NEPA review still underway by EPA, Region 6, result in a determination that the NPDES permit is denied or that the proposed facility should not be constructed at the proposed location, SWEPCO agrees to return the area disturbed to its approximate original contour and revegetate the area to the satisfaction of the EPA.

3. EPA's decision approving this limited construction on the dragline erection site does not obligate EPA in any way regarding the final NPDES decision for the South Hallsville Lignite Mine Project.

4. EPA reserves the right to withdraw this authorization should new information indicate that significant adverse environmental impacts will result from the construction. In such an event, SABINE shall immediately cease construction activities, and take measures to restore the affected environment if necessary.

Please inform us of the date construction starts and keep us appraised of your activities relative to this authorization. If you have any questions regarding the decision or the stipulations to this approval, please contact Mr. Clinton B. Spotts at 214-767-2716.

Sincerely yours,

Frances E. Phillips

Dick Whittington, P.E.
Regional Administrator